Ministry of Environment

2012-13
ANNUAL REPORT

Government of Saskatchewan

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Letters of Transmittal

Her Honour, the Honourable Vaughn Solomon Schofield,
Lieutenant Governor of Saskatchewan.

May it Please Your Honour:

I respectfully submit the Annual Report of the Ministry of Environment for the fiscal year ending March 31, 2013.

The Government of Saskatchewan remains committed to transparency and accountability, through clear reporting and improved access to public information. This report has been prepared with a focus on responsibly managing expenditures and demonstrates progress toward meeting the Ministry's commitments made in the 2012-13 fiscal year.

The Ministry of Environment manages our Province's diverse landscapes and promotes sustainable use of our natural resources in a manner that supports a healthy environment, a growing economy and strong, vibrant communities. This report describes the Ministry's key accomplishments on delivering Government commitments as outlined in the *Government Direction for 2012-13: Keeping the Saskatchewan Advantage.*

Included in the commitment to meet the challenges of economic and population growth, the Ministry continued its work in 2012-13 on a results-based environmental regulatory model to improve protection of the environment and promote innovative tools for environmental management. This includes new and amended legislation, continuing progress on the Saskatchewan Environmental Code to streamline how we do business, and a focus on client service to improve how compliance and enforcement is conducted.

As part of the results-based regulatory model, *The Environmental Assessment Amendment Act, 2010* was proclaimed. The amendments support the Government's growth plan by increasing legal certainty for project developers, promoting greater efficiencies in the environmental assessment process while ensuring adequate environmental safeguards to protect the environment and maintain public health.

Progress continues to be made on developing Saskatchewan's Environmental Code. The Environmental Code's development has been driven by an unprecedented level of stakeholder involvement, consultation and leadership.

The outcomes of 2012-13 and the strategies and key actions that the Ministry of Environment will undertake in the next year will help support the Government's plan for growth by identifying key opportunities and maintain our commitment to environmental protection and resource management.

Respectfully submitted,

Ken Cheveldayoff
Minister of Environment

The Honourable Ken Cheveldayoff

I have the honour of submitting the Annual Report of the Ministry of Environment for the fiscal year ending March 31, 2013. I acknowledge responsibility for this report and declare that the information contained within this report is complete, accurate and reliable. I further acknowledge responsibility for the financial administration and management control of the Ministry of Environment.

Respectfully submitted,

Cam Swan
Deputy Minister of Environment

Introduction

This annual report for the Ministry of Environment presents the Ministry's results on activities and outcomes for the fiscal year ending March 31, 2013. It reports to the public and elected officials on public commitments made and other key accomplishments of the Ministry.

Although a renewed vision in the *Saskatchewan Plan for Growth – Vision 2020 and Beyond* was introduced in October 2012, the *2012-13 Annual Report* will be presented in relation to the vision and goals that guided the development of the 2012-13 Plan.

Results are provided on publicly committed strategies, actions and performance measures identified in the 2012-13 Plan.

The report also demonstrates progress made on Government commitments as stated in the *Government Direction for 2012-13: Keeping the Saskatchewan Advantage*, throne speeches and other commitments and activities of the Ministry.

The annual report demonstrates the Ministry's commitment to effective public performance reporting, transparency and accountability to the public. The 2012-13 report sets the stage for the 2014-15 planning and budgeting process by providing an opportunity to assess the Ministry's accomplishments, results, lessons learned, and identifying how to build on past successes for the benefit of Saskatchewan people.

Alignment with Government's Direction

The Ministry's activities in 2012-13 align with Government's vision and four goals:

Our Government's Vision

A strong and growing Saskatchewan, the best place in Canada – to live, to work, to start a business, to get an education, to raise a family and to build a life.

Government's Goals

- Sustaining growth and opportunities for Saskatchewan people.
- Improving our quality of life.
- Making life affordable.
- Delivering responsive and responsible Government.

Together, all ministries and agencies support the achievement of Government's four goals and work towards a secure and prosperous Saskatchewan.

Sustainable allocation of our natural resources and a regulatory environment that supports innovation is key to the goal of growth. To support this goal, the Ministry continues to make progress on delivering a results-based model for environmental regulation, known as Results-Based Regulation (RBR) in Saskatchewan. Substantive progress has been made in the development of the Saskatchewan Environmental Code (the Code), a key component of the new RBR framework, with the first edition of the Code having gone through extensive public review in early 2012. Proclamation of the first edition of the Code is targeted for 2013.

Progress has been made on reducing red tape through changes to *The Fisheries Regulations* and the proclamation of *The Environmental Assessment Amendment Act, 2010.* The purpose of the Act is to ensure that economic development proceeds with adequate environmental safeguards to protect the environment and maintain public health. The amendments were made to align with the Government's RBR approach and to update and improve the environmental process.

The Ministry continues to enhance co-operation among intergovernmental agencies in environmental and resource management by working with various federal and provincial agencies to minimize duplication and maximize co-operation in environmental regulation and also by working co-operatively with First Nations and Métis people in environmental and resource management.

The Government's second goal to improve the quality of life is supported by the Ministry in a number of strategies. The Ministry continued to work on preventing and reducing the health risks to people and the environment through a continued commitment to assessing and improving environmental performance. Progress on this is demonstrated through such measures as the air quality index, drinking water quality compliance and the percentage of waste recycled. With the approval of *The Household Packaging and Paper Stewardship Program Regulations,* the Government has set the foundation for a Province-wide Multi-Material Recycling Program (MMRP).

The Ministry also maintains healthy air, land, water and ecosystems that support native biological diversity. Progress has been made with stakeholders and partners in the Boreal Watershed Management Strategy which was established to assess and maintain the ecological integrity of Saskatchewan's northern watersheds. The Ministry is also leading the Government's efforts to mitigate and adapt to the impacts of climate change and support the delivery of the Province's Go Green Plan. An additional strategic goal is the Ministry's focus on a client-focused culture that supports high-quality service and continuous improvement. These changes include enhanced access to Ministry staff and information through online portals, in-person and telephone services.

The Ministry of Environment has also made substantive progress in support of the Government's strategic goal of a responsive and responsible Government. Progress was made on improving the effectiveness and efficiency of the Ministry's programs and services through the core program review to ensure the best use of public funds by streamlining processes and enhancing information available to the public.

Ministry Overview

The mandate of the Ministry of Environment is to work with our partners in protecting our water, air and natural resources to achieve a high environmental standard and to support sustainable development in the use of these resources.

The Ministry manages our Province's diverse landscapes and our renewable natural resources in a manner that supports a healthy environment, a growing economy and strong, vibrant communities. The Ministry guides Government efforts to help Saskatchewan people and communities go green and to meet provincial greenhouse gas emission targets.

In October 2012, responsibility for drinking water quality transferred from the Ministry of Environment to the newly created Water Security Agency (WSA)[1]. WSA now handles management of the Province's water resources to ensure safe drinking water sources and reliable water supplies for economic, environmental and social benefits for Saskatchewan.

In January 2013, the Ministry branches were reorganized as follows:

- Executive Administration – including Climate Change and Communications Services;
- Resource Management and Compliance Division - comprised of Compliance and Field Services, Fish and Wildlife, Forest Services and Landscape Stewardship;
- Environmental Protection and Audit Division - comprised of Environmental Assessment, Environmental Protection, RBR & Code Management, Technical Resources and Wildfire Management; and
- Environmental Support Division - comprised of Finance and Administration and Strategic Planning and Performance Improvement.

Implementation of these changes occurred during the 2012-13 fiscal year. The Ministry's key lines of business are outlined as follows with recent changes identified accordingly:

Climate Change leads the development of the provincial Go Green Fund's efforts to reduce greenhouse gas emissions, support water conservation, and enable biodiversity initiatives. It is responsible for supporting the Government-wide climate change program to reduce greenhouse gas emissions in the Province.

[1] *Formerly the Saskatchewan Watershed Authority.*

Communication Services supports the Ministry's goals and objectives by identifying, planning, developing and implementing communication strategies, programs and initiatives. Responsibilites include correspondence and referrals, legislative services, public and media services, production and more recently, freedom of information and protection of privacy.

Compliance and Field Services develops and delivers Province-wide compliance and field enforcement programs, based on the Ministry's compliance strategy and risk assessment, to protect the environment and manage natural resource use. This compliance strategy emphasizes education and awareness and a significant part of the program work is in building a collaborative approach to compliance. The branch maintains a hazardous spill emergency response unit and an enforcement call centre and also provides compliance and field services in provincial parks to the Ministry of Parks, Culture and Sport[2].

Fish and Wildlife programs ensure that sustainable fish and wildlife populations, biological diversity and healthy ecosystems remain available for the recreational, social and economic benefit of Saskatchewan people. The Fish and Wildlife Development Fund (FWDF) receives a portion of the revenue from hunting, trapping and angling licence sales to secure ecologically-important fish and wildlife habitat and to promote resource education and endangered species programming.

Forest Service delivers an ecosystem-based approach to managing provincial forests. It allocates forest resources to promote sustainable forest industry development, monitors forest health, prevents and controls damage from significant insect and disease threats and administers forest inventory and renewal programs.

Lands deliver programs for the management of Crown resource land to maintain healthy eco-systems, in balance with land use. It issues permits and leases for petroleum and mineral exploration and development, wild rice production, building cabins, operating outfitting camps and peat harvesting. It implements integrated land use plans on Crown lands and responds to Treaty Land Entitlement and specific land claims involving Crown land.

Aboriginal Affairs provides leadership, co-ordination and integration of the Ministry of Environment's Aboriginal programs enabling the Ministry, First Nations and Métis peoples, stakeholders and the public to work co-operatively towards common goals and to assist the Government in meeting its legal obligations and to protect the interests of Aboriginal people.

As part of the Ministry restructure, Aboriginal Affairs and Lands Branch have been amalgamated to create the Landscape Stewardship Branch as a step in the Ministry's transformation to a results-based management framework. This change realigns reporting structures and functions to better support the Ministry's RBR initiatives, combining areas of the Ministry that support and conduct much of the Aboriginal consultation activities. The Landscape Stewardship Branch develops, plans, manages, allocates and designates all Crown land administered by the Ministry, with an enhanced focus on the integration of First Nations and Métis interests and rights into environmental and resource management programs and services.

Environmental Assessment manages the Government's environmental impact assessment process to ensure that development proposals are planned in an environmentally-responsible manner and that the public has an opportunity to understand the potential impacts associated with a development and express any concerns that they may have.

Municipal develops and delivers: drinking water programs; wastewater programs; solid waste programs; waste minimization, recycling and stewardship program oversight; Canadian Council of Ministers of the Environment standards workgroup participation; and limited surface water quality monitoring and aquatic nuisance control. It also provides financial support to WSA to manage and protect source water quality and to SARCAN for the Beverage Container Collection and Recycling Program and an operating grant to the Saskatchewan Water Appeal Board.

Industrial develops and manages environmental protection components of the following: mining operations; industrial and commercial operations; hazardous materials spills and environmental emergencies; impacted (contaminated) sites; and hazardous substances and waste dangerous goods storage facilities.

As a result of changes within the Ministry, the Municipal and Industrial branches have been restructured as follows: responsibility for drinking water programs have been transferred to the Water Security Agency; recycling and stewardship program oversight and solid waste management move to the newly created Environmental Protection Branch. Going forward the Environmental Protection Branch will also develop, manage and deliver environmental protection programs in the areas of mining operations, industrial and commercial operations, landfills, hazardous materials spills and environmental emergencies, impacted (contaminated) sites, hazardous substances and waste, dangerous goods storage and waste minimization.

[2] *Formerly the Ministry of Tourism, Parks, Culture and Sport (prior to May 25, 2012).*

Technical Resources provides leadership and support on complex environmental issues, including expert advice, training and assistance throughout the Ministry, and co-ordination of federal-provincial research and standards development. It also delivers the air quality program and provides a role to manage and co-ordinate the Ministry's development of the Code.

RBR and Code Management (newly created branch) will provide project management oversight for the Ministry's transition to a results-based approach to environmental protection and resource management. The branch will work closely with Ministry branches and external committees on developing and bringing into force results-based legislation and the Code. The branch will also lead the Ministry's move to an online business environment including the process of getting services online and the process of supporting clients through the change, as well as the longer term strategy for environmental information management across the Ministry. The branch will be responsible for delivering the new compliance audit program, working with branches on transferring knowledge to staff and with stakeholders regarding the shift to the RBR approach, understanding the new regulatory tools such as the Code, and how to achieve compliance.

Wildfire Management plans and delivers risk-informed forest fire management activities, including detection, preparedness, suppression and protection of values-at-risk. It maintains an aerial firefighting fleet, a radio communications network and meteorological services and assists other jurisdictions with wildfire suppression. It conducts public wildfire awareness, risk mitigation and educational programs.

Finance and Administration provides accounting, financial reporting, financial statement preparation, financial systems management, budgeting, transaction processing and internal auditing services for the Ministry in addition to contract advice, mailroom services and property management services.

Strategic Planning and Performance Improvement (SPPI) provides planning, risk and performance analysis. This includes strategic plan development, performance measures, risk analysis and management, business continuity planning, Lean and training oversight and co-ordination of occupational health and safety programs. As part of changes within the Ministry, SPPI will also include the Client Service Office and Data Management as units within the branch.

Client Service Office assists clients through regulatory, application and permission processes via a variety of channels and maintains a registry of Ministry-administered permissions. It is also responsible for gathering, maintaining and sharing the Ministry knowledge base to facilitate easier access to information about the Ministry and its programs through a one-stop consumer portal. As part of changes within the Ministry, the Client Service Office became part of the Strategic Planning and Performance Improvement Branch within the Environmental Support Division.

The Ministry administers 19 pieces of legislation and associated regulations designed to ensure sustainable development and effective pollution prevention and resource management throughout the Province. Some of the legislation includes:

- *The Environmental Assessment Act*
- *The Environmental Management and Protection Act*
- *The Forest Resources Management Act*
- *The Prairie and Forest Fires Act*
- *The Wildlife Act, 1998*
- *The Fisheries Act (Saskatchewan), 1994*
- *The Provincial Lands Act.*

As the Ministry moves towards a RBR model, a number of these acts and regulations are being revised (See Appendix B for a description of the legislation).

The Ministry maintains 44 offices located in communities throughout the Province and delivers a broad range of programs. The Ministry of Environment's 2012-13 FTE budget is 892.0, which is net of a 36.6 FTE budgeted reduction associated with the transfer to the Water Security Agency which was assigned in-year from the 2012-13 unallocated balance[3].

[3] *As this transfer occurred mid year, the actual FTE utilization shows an overage of 8.3 FTE's.*

Progress in 2012 - 13

Government Goal: Growth

Strategy – Regulatory environment is timely, clear and encourages innovation

Key Actions and Results

Implement the Saskatchewan Environmental Code to be followed by anyone conducting activities regulated under environmental legislation in Saskatchewan.

- Saskatchewan is working toward a new legal framework for managing and protecting its environment as a way to encourage innovative environmental solutions for enhanced environmental protection while supporting the Province's growing economy.

  The Code contains legally binding, enforceable requirements to be followed by anyone conducting activities regulated by any of the Acts that reference the Code.

  The Code will consolidate many guidelines and policies and enable *The Environmental Management and Protection Act, 2010* and *The Forest Resources Management Amendment Act, 2010,* to be proclaimed. As a result, four Acts will be replaced with two; and eight regulations will be reduced to five, resulting in red tape reduction in the Ministry.

  The Code and associated regulations are currently in the regulatory approval process with adoption expected later in 2013. During the 2012-13 fiscal year there were more than 90 meetings, teleconferences and presentations regarding the Code. That process included consultation with over 200 expert participants and industry leaders. The document *2012 Public Review Saskatchewan Environmental Code: Summary of Comments and Responses,* containing a summary of the 120 comments received during public consultation and the Ministry responses, was posted on the Ministry website.

  Following extensive consultation, the first edition of the Code has been completed and the Code Development Committee has recommended its adoption to the Minister. The Code and associated regulations are currently in the Government's regulatory review process.

  The Industrial Branch completed work on the preparation of five Code chapters, and provided training on the implementation of these chapters to increase understanding among important stakeholders regarding application of the Code.

  In 2012-13 the Industrial Branch engaged industry to redraft the Saskatchewan Environmental Quality Standards (SEQS) with a view to increased clarity and flexibility for proponents that focuses less on process and rules and balances growth with sound environmental practices.

  The Ministry's RBR and Code Management Branch drafted a comprehensive guidance document that links legislation, Code chapters and standards.

  Ministry staff made informal presentations throughout the year to industry stakeholders to promote the RBR framework. In partnership with the Saskatchewan Environmental Industry and Managers Association (SEIMA), Ministry staff presented four times on the impacted sites chapters of the Code to SEIMA members including other governments, environmental managers and companies from various economic sectors such as mining, forestry, agriculture as well as the product and service providers to those sectors.

Fulfill the legal duty to consult with First Nations and Métis people when Ministry actions or decisions may have an adverse impact on Aboriginal or Treaty rights and traditional uses through implementation of the Province's Consultation Policy Framework.

- The Ministry provided ongoing support for the implementation of the Ministry's policy guidance and operational procedures for consultation with First Nations and Métis communities, and in the development of branch-specific directives for consultation. Branches reported that 568 notification letters regarding 34 projects were sent to First Nations and Métis communities.

  To achieve consistent implementation of Government's duty to consult process, the Aboriginal Affairs Branch managed Ministry consultation activities related to the development of the Code. This included a presentation to the Federation of Saskatchewan Indian Nations (FSIN) Lands and Resources Commission on May 30, 2012. A Code update letter was sent to all First Nations and Métis communities to inform them of the release of the "Summary of Comments and Responses" from the public review period. The Ministry continues to encourage dialogue and build community awareness of the Code among First Nation and Métis communities.

- Increased understanding of the provincial perspective and processes regarding the duty to consult helps the Ministry to better understand community concerns and interests. As a result, the Ministry established the Métis Environmental Resource Management Advisory Committee (MERMAC), a structured forum for communication, information sharing and feedback

between the Ministry, Métis communities and the Métis Nation - Saskatchewan. MERMAC had two meetings in 2012 (July 31 and December 15) to clarify terms of reference and provide committee members with information regarding the duty to consult, proponent handbook and the Code. The committee provided feedback on the Code and consultation process.

- The Ministry continues to collaborate with the Ministries of Government Relations[4] and Justice on negotiations with Métis Nation-Saskatchewan (MN-S) for the recognition of harvesting rights within the Province.

- The Ministry collaborated on the development of the MN-S negotiation work plan submission to the Government Relations Consultation Participation Fund. This fund submission, along with the associated Order in Council support documents and Cabinet Information Item will help to support MN-S participation. A practical, results-based work plan is now established and Cabinet is positioned to be fully informed and supportive of the negotiations and associated expenditures.

- The Ministry entered into a service agreement to support MN-S work with the Ministry. MN-S hired a Harvesting Co-ordinator to liaise with Compliance and Field Services Branch regarding the Environmental Assessment Screening Process and individual Métis assertions of Aboriginal rights. The service agreement continues to provide an important forum for information sharing and helps to create a strong working relationship with the MN-S and individual Métis harvesters. This allows for continued support and involvement in provincial harvesting negotiations with the MN-S.

- The Ministry entered into a service agreement with the Agency Chiefs Tribal Council (ACTC) to support work on issues of mutual interest. One staff position was established within ACTC and technical support was provided to ACTC on renewable resource and environmental management issues.

- The Ministry collaborated with the Ministry of Government Relations in evaluating and assigning priorities for Aboriginal consultation participation funding. Projects were identified that triggered the duty to consult and contact information was provided within notification letters for funding. Communities which have received funding have provided responses to duty to consult notifications and identified impacts to be mitigated by the Ministry.

- The Ministry collaborated with the Ministries of Government Relations[5], Justice and Economy to develop the *Government of Saskatchewan Proponent Handbook – Engagement with First Nations and Métis Communities.* Engagement sessions on the draft handbook were held in three locations to inform proponents, First Nations, Métis, and Federal and Provincial Government officials and provide opportunities for their input and advice.

Maximize provincial-federal co-operation/co-ordination to minimize the overlap and duplication through agreements and memorandums of understanding.

- The Environmental Assessment Branch continues to engage in discussions with the Canadian Environmental Assessment Agency (CEAA), maximizing provincial-federal co-operation to ensure an efficient and effective process that enhances environmental protection while eliminating duplication. In August 2012, Environmental Assessment Branch provided comments on the CEAA's *Regulations Designating Physical Activities* which identifies types of activities that may be subject to a federal environmental assessment.

  Based on comments provided by Saskatchewan and other jurisdictions, several revisions to the *Regulations Designating Physical Activities* have been proposed by CEAA. As a result, key messages have been removed from the proposed amended regulations including potash mines and extraction of non-potable groundwater. If these amendments are passed, the Province would have the option to conduct environmental assessments on projects which include these activities while avoiding the duplication of effort resulting from a joint environmental assessment process with the CEAA. Eliminating this duplication will allow more efficient and timely conduct of environmental assessments at both levels of government and eliminate procedural delays for project proponents and industry clients.

Other co-operative initiatives include:

- A five-year National Air Pollution Surveillance (NAPS) Memorandum of Understanding (MOU) between Saskatchewan Ministry of Environment and Environment Canada was renewed in 2012. Under the MOU, Environment Canada provides funding and the Ministry's role is to operate and maintain the Saskatchewan NAPS program. An Order in Council was prepared and approved by Cabinet in fall 2012. The Ministry will

[4] *Formerly the Ministry of First Nations and Metis Relations (prior to May 25, 2012).*

[5] *Those entities that now make up the Ministry of the Economy include the economic development role of Enterprise Saskatchewan; Labour Market Development Services (formerly with Advanced Education, Employment and Immigration); Northern and First Nations and Métis economic development (formerly with First Nations and Metis Relations); and Energy and Resources.*

continue to be provided with Federal Government funding, in the form of monitoring equipment, to ensure that Saskatchewan's air monitoring network is financially sustainable for the next five years.

- The Ministry continues to work with Alberta on a joint MOU for data sharing. The Ministry met with Alberta Environment and Sustainable Resource Development on April 19, 2012 to discuss the final modeling scenarios based on Saskatchewan and Alberta's emission inventories. The Ministry has up-to-date acid deposition modeling completed using Regional Lagrangian Acid Deposition model (RELAD), Community Multi-scale Air Quality Modeling System (CMAQ) and AURAMS (A Unified Regional Air-Quality Modelling System) for sulphur and nitrogen. The majority of the impacts are noted in Alberta rather than Saskatchewan.

- The Ministry continues to work on Canadian Council of Ministers of the Environment (CCME) files with other provinces, territories, and federal working groups. CCME serves as a principal forum for Saskatchewan members to discuss and act on issues of critical national importance and to develop standards, codes and guidelines that can be used by environment ministries across Canada. The Ministry has active participation on CCME's water quality, municipal wastewater, extended producer responsibility and soil quality task groups, and air and water management committees.

In 2012, these task groups/committees published:

  - Canadian Soil Quality Guideline for the Protection of the Environment and Human Health – Barium
  - 2010-2011 Progress Report on The Canada-Wide Acid Rain Strategy for Post-2000
  - 2010 Progress Report on the Canada-wide Standards for Particulate Matter and Ozone
  - 2010 Progress Report on the Canada-wide Standard for Mercury Emissions from Coal-fired Electric Power Generation Plants
  - Canadian Water Quality Guideline for Trichlorfon
  - Canada-wide Approach for the Management of Wastewater Biosolids
  - Code of Practice for Residential Wood Burning Appliances
  - Guidance Document on Achievement Determination: Canadian Ambient Air Quality Standards for Fine Particulate Matter and Ozone
  - Guidance Document on Air Zone Management
  - Canada-wide Standard for Benzene: 2010 Final Report
  - Canadian Environmental Water Quality Guidelines for the Protection of Aquatic Life – Nitrate
  - Canadian Environmental Water Quality Guidelines for the Protection of Aquatic Life – Glyphosate

- The Fish and Wildlife Branch of the Ministry continues to participate in federal-provincial working committees under the Canadian Council of Fisheries and Aquaculture Ministers agreement on inter-jurisdictional co-operation. Noteworthy projects include involvement in federal regulations to control and manage aquatic invasive species, work to review and renew the National Code on Introductions and Transfers and to provide provincial interests and perspectives concerning amendments to the federal *Fisheries Act*. Results include improved co-operation and streamlined regulations.

- Other co-operative federal-provincial initiatives include the South of the Divide Multi-Species Action Plan and working with the Federal Government on a caribou recovery strategy. Under the South of the Divide initiative, three successful meetings were held with considerable support from stakeholders. Recovery measures were developed as was the beginnings of an implementation plan. Stakeholder investment remains high. An Order in Council for $50,000 has been approved and $30,000 has been spent from the Federal Grants and Contributions Program to support this initiative.

- The Fish and Wildlife Branch of the Ministry initiated their work plan for the federally required caribou range plans and formed a technical research group to respond to federal requests for caribou information.

- The Wildfire Management Branch of the Ministry continues to participate in federal-provincial activities. The Canadian Interagency Forest Fire Centre (CIFFC) is the umbrella agency in Canada that oversees requests for interagency imported or exported resources. Border agreements with Manitoba, Alberta, Northwest Territories and Yukon are undertaken as per the agreement, or through CIFFC.

  During times of high wildfire activity, the Province of Saskatchewan utilizes wildfire reciprocal agreements such as the Mutual Aid Resource Sharing Agreement (MARS) through CIFFC. Saskatchewan is also a member of the Northwest Wildland Fire Protection Agreement (Northwest Compact), and Border Agreements partnering Canadian and American jurisdictions for reciprocal support to augment resources. Internationally, Saskatchewan is a member of the Australasian Fire Authorities MARS Agreement and a member of the International Wildland Fire Management Arrangement between Canada and New Zealand.

  During times of low wildfire activity in Saskatchewan, the program assists other jurisdictions with resource support through exports of people and equipment. A total of 87 Wildfire Management staff assisted other jurisdictions with wildfire management efforts. Saskatchewan wildfire resources and expertise assisted directly with protecting people, homes, businesses and resources from wildfire threat during the most intense wildfire activity.

Saskatchewan provided resources to Canadian jurisdictions; Ontario, British Columbia and Quebec, and to U.S. jurisdictions: Idaho, New Mexico, Utah, Montana, Colorado, Wyoming, and South Dakota.

Specifically, personnel and aviation resources were deployed to provide emergency wildfire protection to agencies that exceeded their capacity to manage critical wildfires during 2012-13 including:

- Ontario by supplying 20 firefighters and one liaison for 14 days in July;
- British Columbia by supplying 20 firefighters and one liaison for nine days in August;
- Quebec by supplying nine personnel, two CL215T air tanker aircraft and one guide aircraft for eight days in May;
- US Forest Service (Colorado, Idaho, Wyoming, Utah and New Mexico) by supplying 10 personnel, one guide aircraft and two CV580 air tanker aircraft for 31 days in June and July;
- State of Montana by supplying nine personnel, two CV580 air tanker aircraft and one guide aircraft for 93 days beginning in June and ending October 1; and
- State of Idaho by supplying 20 firefighters and one liaison for 17 days in August and September.

- Wildfire Management staff assisted other agencies outside of reciprocal agreements in fulfilling their mandates and/or in utilizing Saskatchewan wildfire expertise for operational or training delivery. The Ministry assisted Australian wildfire agencies in an expertise exchange by supplying one wildfire investigator for a week in June to give presentations on the wildfire investigations program in Saskatchewan. The Ministry assisted the Ministry of Parks, Culture and Sport with prescribed burns in Greenwater Lake and Duck Mountain provincial parks by supplying 25 staff.

  These exchanges enhance relationships between wildfire agencies and governments/jurisdictions, and assists in ensuring future relationships in times of need.

Strategy – Sustainable allocation of natural resources

Key Actions and Results

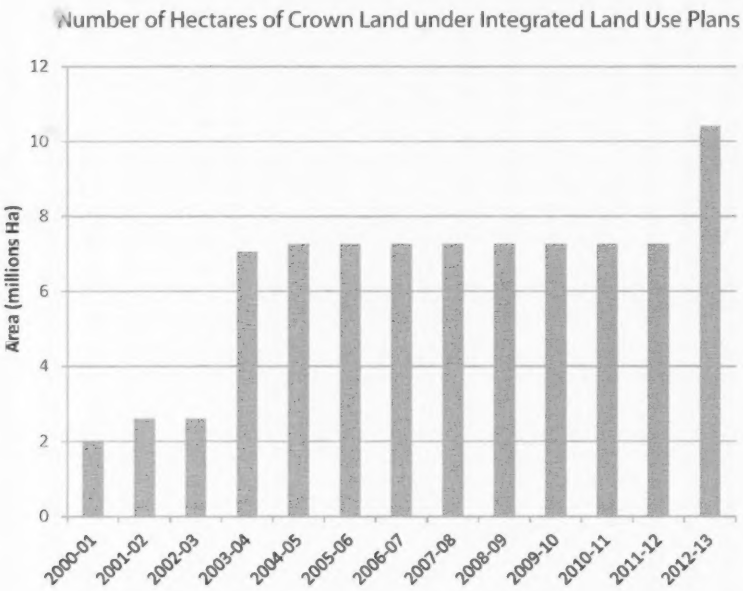
Lead land use planning processes that inform development and resource allocation decisions that are supported by diverse stakeholder and user groups.

- The Ministry continues to lead land use planning to inform development and resource allocation decisions that are supported by diverse stakeholders and user groups. Currently there are 10.4 million hectares of Crown Resource Lands under approved land use plans, an increase of 3.1 million hectares since 2011-12, with an additional 3.9 million hectares undergoing the planning process. The completion of the Misinipiy Integrated Land Use Plan, developed in partnership by the Ministry of Environment and the Lac La Ronge Indian Band, was announced in May 2012. The plan provides a framework to guide land and resource management decisions for more than 3 million hectares of forest land in northern Saskatchewan.

Progress in 2012 - 13

There are two performance measures:

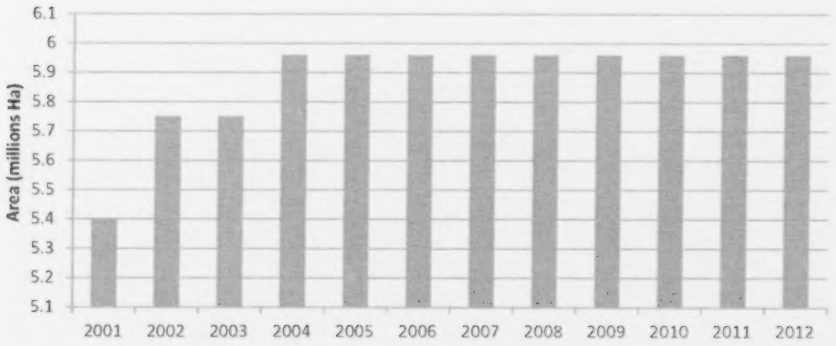
- Number of Hectares of Crown land under the Integrated Land Use Plans
- Number of Hectares in the Representative Areas Network (RAN)



Source: Ministry of Environment, Lands Branch

Integrated land use planning is an ecosystem-based tool that links the environment, the community, and the economy in ways that help ensure the sustainability of resources. Land use plans are tools the Ministry uses to manage the subject land area with certainty as to acceptable activities and levels of protection and conservation. The unification of the varied interests through the planning process requires time, commitment, a high level of participation and financial resources. This results in more efficient and supported resource management decision-making over the long term. The total areas of Crown land under integrated land use plans increased to 10,400,000 hectares, an increase of 3,132,300 hectares since 2011-12. This was due to the approval of the Misinipiy Integrated Land Use Plan in 2012.

Number of Hectares in the Representative Areas Network



Source: Ministry of Environment, Lands Branch

The Representative Areas Network (RAN) is intended to conserve representative and unique landscapes throughout the 11 ecoregions of the Province. The RAN includes designated Crown lands that have been given a level of protection by legislation and private lands that are managed for biodiversity by agreement.

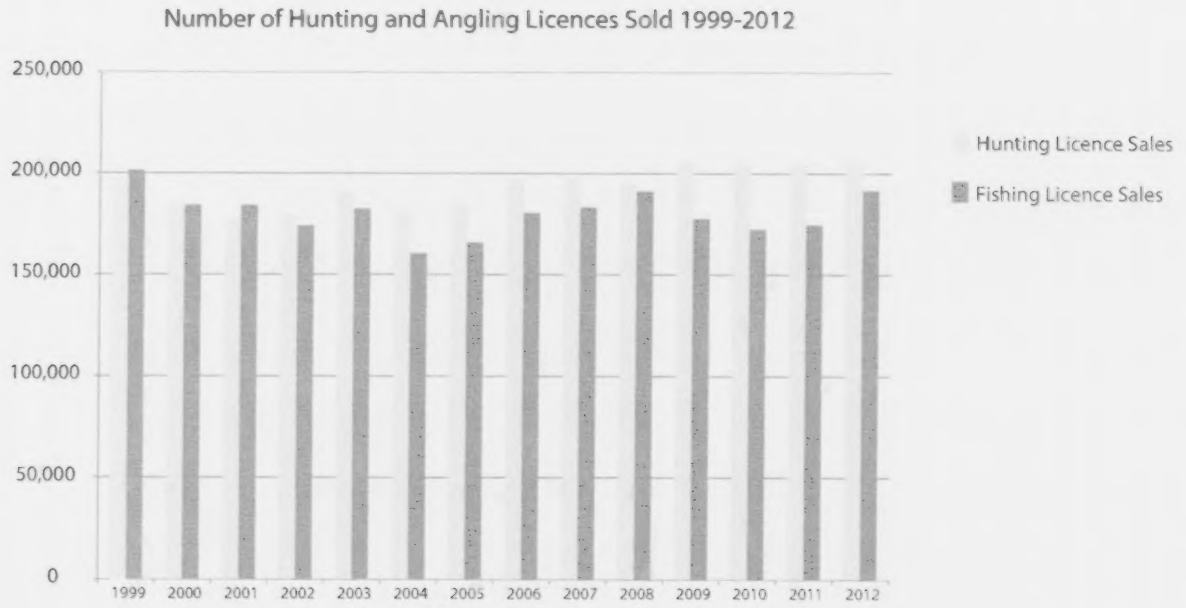
Establishing protected areas is seen in the international science community as a "natural solution" and a powerful tool against carbon emissions and possibly climate change. The RAN conserves biodiversity in a variety of recognized conservation lands (parks, ecological reserves, federal and provincial pastures, etc.). The measure of the number of hectares in the RAN is an indicator and acts as a benchmark for measuring environmental change and ecological health. RAN areas also serve to help maintain biodiversity and act as benchmarks when compared to managed landscapes.

There are challenges in adding significant numbers of hectares to the RAN. In agricultural portions of the Province, the vast majority of land is privately held and additions to the RAN are achieved in small quantities. In northern Saskatchewan, even though Crown land dominates, many interests must be considered and weighed to achieve a balance between conservation and economic development.

The greatest risk to achieving the RAN targets are increasing development pressures and the resulting developments that either decrease the ecological value of the land or take up lands fully so that they are not representative of a natural landscape.

To maintain healthy ecosystems that support native biological diversity, the Ministry of Environment continues to identify, protect and manage sites within the RAN. There are 5.96 million hectares, or approximately nine per cent of the Province, in the RAN. The number of hectares remained unchanged between 2004 to 2011; however, a number of sites have been identified within integrated land use plans and, as these land use plans are approved and recommendations for designation of proposed representative areas are implemented, hectares will be added. In May 2012, the Government of Saskatchewan adopted the Misinipiy Integrated Land Use Plan. This plan identifies new protected areas in the north central area of Saskatchewan and work is underway to designate the Pink Lake Representative Area Ecological Reserve. Once designated, the Pink Lake site will be the largest provincially designated protected area in Saskatchewan, consisting of approximately 366,000 hectares, nearly the size of Prince Albert National Park.

Progress in 2012 - 13



Source: Ministry of Environment, Fish and Wildlife Branch

Hunting and angling are of social, cultural and economic importance in the Province. Licence sales are tracked annually and serve both as an indicator of short- and long-term interest in these activities and as an indication of the importance of hunting and fishing as significant contributors to the economic health of the Province. Measuring the number of licences sold helps to determine the priority areas for fish and wildlife population assessments and to manage the competing interests of users. As such, this measure aligns with the Ministry's strategy to manage sustainable use of natural resources to increase economic benefits.

The Ministry has experienced high levels of participation in angling and hunting activities by members of the public over the last number of years which supports continued focus on conservation management of our wildlife and fisheries resources.

In 2012, the number of hunting licences sold was 207,057, an increase of one per cent over 2011 sales. Also in 2012, the number of fishing licences sold was 191,545, an increase of 8.9 per cent over 2011 sales. Saskatchewan resident and three-day Saskatchewan resident licence sales experienced a similar increase.

Develop a harvest plan for fish and wildlife that supports commercial and recreational use

- The Fish and Wildlife Branch completed a hunter harvest survey of all Big Game Draw hunters, deer spotlight surveys and surveys completed for pronghorn antelope, bear, elk and moose. Fish populations assessments were completed for 35 lakes and management plans completed. This information has been utilized to inform the public and to revise fish and wildlife management approaches as required in order to achieve optimal, sustainable use.

Provide appropriate development and use opportunities on Crown resources lands through the review, approval and management of land use dispositions.

- The Ministry continues to manage Crown resource land use through an ongoing review of allocation and development applications and inspection of existing dispositions in order to meet Government and public priorities. The Ministry manages approximately 9,000 land dispositions and approximately 56 per cent of the Province for the use and benefit of all people of the Province. Crown resource land use is managed in a manner that meets Government and public priorities.

Facilitate land acquisition by Treaty Land Entitlement First Nations and First Nations with Specific Claim agreements.

- The Ministry of Environment, through its Lands Branch, continues to facilitate land acquisitions by Treaty Land Entitlement First Nations and those First Nations with Specific Claim agreements. Between April 1, 2012 and March 31, 2013, the Ministry responded to 70 private land and Crown land selections in fulfillment of Ministry responsibilities as per the Treaty Land Entitlement Framework Agreement.

Support a sustainable forest sector through the allocation of wood fibre, encouraging diversification of forest products and services and encouraging the use of biomass.

- The Pasquia-Porcupine Amending Agreement is expected to be approved by Cabinet in mid-2013.

- Although the actual amount of timber harvested each year has been far less than the Provincial Harvest Volume Schedule (HVS) there is an increasing trend in the annual timber harvest from the low experienced in 2008-09.

  Three new volume-based Timber Supply Licences (TSL) were issued and three were amended for increased volume. One volume-based TSL was renewed and four grazing TSL were issued in 2012-13.

- The development of a Forest Management Plan for the Island Forests area continues. Volume 1, which provides an account of the current state of the forests in the planning area along with a synopsis of previous forestry activities, was prepared and released for a public review in February 2013.

  Work and ongoing consultation on the plan continues in order to assess forest management strategies and address stakeholder concerns.

  The current forest management plans for the Prince Albert Forest Management Agreement (FMA) area and the Pasquia Porcupine FMA area are soon scheduled to be updated. The respective companies have initiated their process to prepare new forest management plans. Appropriate staff from the Forest Service have been designated to sit on the forest management planning teams that oversee the development of these plans.

- Officials from the Forest Service Branch, together with forestry officials from the Ministry of the Economy, collaborated with staff from Meadow Lake Tribal Council (MLTC) Resource Development LP based in Meadow Lake to conduct an analysis of available biomass supplies that would be used in a proposed 36 megawatt biomass-fired power plant in Meadow Lake. Based on the findings of this report, a formal announcement of the start of a project to build the proposed facility was made on August 1, 2012.

Prioritize wildfire suppression for the marketable timber supply in Saskatchewan.

- Action on wildfires is predicated on the values that may be threatened if a wildfire is allowed to burn unmanaged. In order of priority they are: human life, communities, commercial timber and major infrastructure (power lines etc.). Wildfire Management strategies are applied operationally dividing the provincial land base up according to the values that are present on the landscape. In those instances where a wildfire threatens values that are prioritized based on the strategies, appropriate response action is taken.

Rate of Compliance with Environmental Laws and Regulations

Sector	Compliance Rate					Field Contacts					Warnings					Charges Laid				
	2008-09	2009-10	2010-11	2011-12	2012-13	2008-09	2009-10	2010-11	2011-12	2012-13	2008-09	2009-10	2010-11	2011-12	2012-13	2008-09	2009-10	2010-11	2011-12	2012-13
Wildlife	87%	88%	91%	94%	**91%**	17,204	12,439	14,363	14,668	**14,250**	1,230	1,210	1,055	410	**1,329**	440	289	267	272	**327**
Fisheries	83%	81%	90%	91%	**83%**	22,913	19,050	20,730	20,898	**19,432**	2,378	1,950	1,691	1,297	**1,004**	572	482	449	595	**598**
Environmental	69%	65%	62%	79%	**n\a***	743	671	744	812	**n\a***	163	192	265	138	**131**	42	52	23	28	**68**
Land Management	83%	80%	90%	91%	**n\a***	374	219	193	262	**n\a***	45	43	19	16	**3**	3	2	0	8	**0**
Mineral Exploration	93%	87%	86%	94%	**n\a***	212	23	76	103	**n\a***	15	2	11	5	**1**	0	1	0	1	**0**
Forestry	94%	75%	82%	86%	**n\a***	3,270	78	94	86	**n\a***	207	21	10	12	**27**	3	0	7	0	**2**

*n\a Information not accurately maintained in program - new systems for data capture is under review.
Note: Inconsistencies of information recorded in branch programs makes accurate assessment unreliable.
Information is only from compliance activity by conservation officers and does not include compliance monitoring by environmental protection officer or forestry officers.

Compliance with environmental laws and regulations is critical to ensuring that all people are held to the same standards in their use and enjoyment of the Province's natural resources and to ensuring that our resources are available for future generations. Compliance rates have improved in all sectors since 2009-10 which may be directly correlated with the Ministry of Environment's full suite of tools to encourage compliance with requirements established by law. There are three major components:

1. Education and awareness activities that inform the public, stakeholders and industry on requirements and expectations. Education and awareness tools include brochures, posters, advertisements and news releases. Significant effort is invested in working with the Saskatchewan Association of Rural Municipalities (SARM), resort communities and the public at large to increase understanding and awareness of the environmental impact and damage associated with unauthorized shoreline alterations. Education and awareness efforts in 2012-13 included compliance information to liquid waste haulers, cottage owners and developers regarding the requirements when working along waterways or shorelines and information to rural municipalities on regulations related to work near water given the flood conditions experienced this year.

2. Compliance assurance is achieved through permit and lease conditions, performance bonds and other economic instruments. Inspections are used to detect non-compliance at an early stage so that it can be corrected with minimal impact. The new RBR model will enhance these activities through the development of standards, best practices and the Code to guide the public, resource users, stakeholders and industry.

3. Enforcement activities can include surveillance, special investigations and intelligence analysis. Actions to address violations can range from arrests, seizures, court orders and prosecution to the use of alternative measures and innovative sentencing.

As the public is becoming more aware of violations under environmental regulations they are subsequently calling the Turn in Poacher (TIP) line more often to notify the Ministry. In 2012-13, approximately eight per cent of TIP calls were about environmental infractions.

Turn in Poacher Program Calls

Call type\year	2008	2009	2010	2011	2012
Wildlife	713	727	747	734	799
Fisheries	77	85	78	81	90
Environmental	116	118	78	114	78
Forestry	1	5	1	2	5
Miscellaneous	11	23	9	15	9
Total	936	958	913	946	981

Progress in 2012 - 13

Government Goal: Quality of Life

Strategy – A healthy and productive environment

Key Actions and Results

Maintain productivity and biological diversity through protecting and renewing Saskatchewan's forests.

- Overall, 96.8 per cent of harvested forest areas in Saskatchewan have been successfully regenerated. Areas with the lowest proportions of Sufficiently Regenerated (SR) forests are the Island Forests and the Pasquia-Porcupine Forest Management Agreement (FMA) area. Most Not Sufficiently Regenerated (NSR) forestlands in the Province pre-date the establishment of FMAs and are therefore the responsibility of the Government to restore to SR status. The State of Provincial Reforestation 2012 Annual Report to Senior Management was completed in June 2012.

- Government obligations for the Forest Service Renewal Program are being significantly reduced in the Island Forests and the Pasquia Porcupine FMA with the re-establishment of commercially viable crop trees. The tree planting program consisted of a spring plant beginning on May 8, 2012 which included a total of 1,977,546 trees planted (69,750 Red Pine and 1,907,796 Jack Pine) in the Nisbet Island Forest. A total of 1,732 hectares of NSR forestlands was site prepared to facilitate tree planting in 2013-14 in the Nisbet, Canwood and Fort a la Corne Island Forests. A trial was conducted on 27.2 hectares of NSR forestlands where the Brack Scarifier was used with an air seeding attachment to disperse seed. This project will be monitored over the next couple of years to assess if the treatment was successful.

  A total of 1,587 hectares of brush saw stand tending was completed in the Pasquia Porcupine FMA between May and October. The stand tending program fell short of its target leaving about 800 hectares to be treated next year because of the early snowfall and wet weather.

  There were 2,253 hectares of NSR surveys completed on the Prince Albert FMA and 8,412 hectares of NSR surveys completed on the Northwest Communities TSL. The majority of the area surveyed is considered SR.

- Insect and Disease Program - Spruce budworm: Damage to spruce trees in treatment blocks was significantly reduced as compared to untreated controls (below the 40 per cent defoliated target). Spatial data and maps showing the extent and severity of insect and disease damage were completed.

  In June 2012, approximately 15,000 hectares of spruce forest was aerially sprayed with the biological insecticide *Bacillus thuringiensis var. kurstaki (Btk)* to control spruce budworm in the severely defoliated commercial forest in and around the Big River and Hudson Bay areas. Interim and final reports have been received from the contractor. Aerial surveillance of insect and disease disturbances (including spruce budworm) has been completed for the provincial forest from the Alberta to Manitoba borders and from the forest fringe north to the Churchill River.

  The Saskatchewan status of forest insects and diseases for 2012 was reported at the National Forest Pest Forum in Ottawa December 3-7, 2012. Monitoring activities have been completed to quantify spruce budworm overwintering larval populations. Samples were processed, and status of forest insects and diseases revealed low infestation rates. Data results were used to decide not to implement the spruce budworm spray program in 2013-14.

- Mountain pine beetle (MPB) aerial surveys and ground-truthing activities have been completed on pine stands within the northern commercial forest and in the Cypress Hills Interprovincial Park (CHIPP). To date, no MPBs have been detected in the northern boreal forest of Saskatchewan. In total, 433 trees were identified and removed in CHIPP this winter. Fall and burn operations in high risk MPB infested pine forests in and around Slave Lake and Marten Hills areas in eastern Alberta were completed by March 31, 2013.

  In 2012, 40 helicopter landing areas were installed; one in each of 40 townships in high-risk provincial forest areas along the western border with Alberta. The purpose of these is to expand our network for MPB detection traps as well as increase access for response. An inventory was completed of pine stands on lands adjacent to CHIPP.

- The MOU between Alberta and Saskatchewan was signed for a co-ordinated MPB response in Alberta. A spring Spread Management Action Collaborative (SMAC) meeting was held in May 2012 to review overwintering and MPB spread data and plan for 2012 fiscal actions. Under this agreement, the following actions are complete:
  - Tree baits have been deployed in leading edge monitoring networks in eastern Alberta;
  - Aerial photography surveillance for change detection work has been conducted on 47 townships north of the Cold Lake Air Weapons Range in eastern Alberta;
  - Fall and burn operations in high risk MPB infested pine forests in and around Slave Lake and Marten Hills areas in eastern Alberta have been completed. Level 1

management (Fall and Burn) resulted in survey and quality inspection at 356 high priority sites in Martin Hills, Swan Hills and Slave Lake areas. Of the 2,571 trees removed in Lesser Slave Lake area, Saskatchewan paid for removal of 519 trees.

- All planned Dutch Elm Disease removals are complete. The number of elm removed in 2012 buffer areas was 162, compared to 92 in 2011; the number of elm removed in parks was 32, compared to 72 in 2011.

- The wildfire program manages risks to ecosystem health in forested areas and risks to human health and safety through a policy of protection of "values at risk" in suppression activities. This is combined with allowing beneficial wildfires that do not impact human health, decreasing human caused wildfires, public education and awareness, and ensuring safe work practices into all aspects of program delivery.

  Allowing some wildfires to burn reduces disease occurrence and assists in limiting future threats to communities and other important values by reducing the availability and continuity of high risk forest fuels. Wildfire is also viewed as a tool to create a more diverse habitat where the wildfire does not threaten important values. The ecological benefits of wildfires (i.e. renewal of ecosystems) do not occur when all wildfires are suppressed.

  In 2012-13, the total burn area was 227,528 hectares compared to 343,720 hectares for 2011-12. The 10-year average was 548,892 hectares. There were 256 wildfires (total 16,117 hectares) in Full Response Zone in 2012. There were 153 wildfires that renewed a total of 211,412 hectares in the Modified/Observation Response Zones.

Protect the pristine waters of the northern boreal watersheds from the impacts of development through baseline assessment, monitoring for change and assessment of risks resulting from development.

- The Boreal Watershed Initiative, established in 2011-12 to assess and maintain the ecological integrity of Saskatchewan's northern watersheds, is comprised of seven priority or thematic study areas: water quality; aquatic ecosystem health; air quality; soil quality; terrestrial ecosystem health; terrestrial biodiversity; and traditional knowledge. Years one and two of the project focused on baseline studies in strategic or sensitive areas, and the development of tools which promise to be useful in sustained monitoring of this vast and relatively remote landscape. Information gathered will help support the provincial growth agenda of quality of life and identify the importance of environmental thresholds.

Highlights of work carried out in 2012-13 include:

- Completed third snowpack survey to assess impact of airborne pollutants in northwest Saskatchewan. Previous surveys had suggested increases in acid-forming nitrogen compounds, but analytical methods were not optimal. Metals, general chemistry and PAHs (Polycyclic Aromatic Hydrocarbons) are also being analyzed.
- Completed sampling for baseline soil characteristics across the Boreal Shield and Taiga Shield Ecozones. Data from more than 200 sites will be used in modeling acid sensitivity of northern landscapes and waters.
- Human-footprint mapping using different techniques has been completed for parts of Saskatchewan's north. The work has resulted in a snapshot of current disturbances and the costs and benefits of the techniques employed will be evaluated in selecting tools for continued periodic mapping of land disturbances in the north.
- Completed toxicological analysis of 97 otters supplied by trappers. As apex predators, the otters are proxies for accumulation of metals and other toxins across their ranges. A pilot study showing a five-fold or more variation in metal uptake in different segments of organs led to re-evaluation of sampling and analytical protocols. As a result of this effort, lab analysis is underway at four laboratories – University of Saskatchewan Toxicology Centre, University of Michigan, University of Regina and Environment Canada's lab in Ottawa.
- Trees are suitable to reconstruct the historical changes of environmental perturbations because the metal concentrations and isotopic ratios of their annual rings represent at least partly the chemistry of the environment (air and soil) at the time of their formation. Dendrochemistry and dendrochronology sampling at 10 northwest Saskatchewan sites was conducted and analysis and interpretation of 474 tree cores is underway.
- Completed the collection of 120 passive air monitoring samples and sampling for for sulphur dioxide (SO_2), nitrogen dioxide (NO_2) and ozone (O_3).
- Monthly Passive Air Monitoring Sampling for for sulphur dioxide (SO_2), nitrogen dioxide (NO_2) and ozone (O_3) completed at 10 sites throughout the Boreal.
- Completed report on The Firebag Hills Canadian Aquatic Biomonitoring Network Pilot Project, March 2013.
- Completed proposal to consider the suitability of dragonflies (Odonata) as ecological indicators of freshwater systems in northern Saskatchewan.
- Trent University and University of Saskatchewan collaborators completed air and ground-supported survey of 95 additional sites, bringing the total to >200 boreal locations. Analytical results have been received and a final report is underway.
- Reports on mapping of anthropogenic disturbances

were completed. These products need to be evaluated in light of the Ministry's need for periodic updating of footprint mapping vis-a-vis cost and reliability/accuracy of products. This work has become a priority with caribou work plans.

- The Annual Final Report was completed on Eastern Athabasca Regional Monitoring Program. Community sampling and involvement included Black Lake Denesuline First Nation, Camsell Portage, Fond du Lac Denesuline First Nation, Stony Rapids, Hatchet Lake Denesuline First Nation / Wollaston Lake and Uranium City.

Protect source water through treatment and management of wastewater, monitoring of industrial facilities and compliance programs.

- With the transfer of responsibility for drinking water quality from the Ministry of Environment to the Water Security Agency, the Industrial Branch continues to manage industrial facilities as it pertains to source water and wastewater.

- A total of 23 potable/hygienic water inspections have been carried out for 2012-2013 at mining/industrial related facilities. Precautionary Drinking Water Advisories have been issued to industrial sites where the potential for water quality has been compromised:

Type of Inspection	2012-13
Hygienic Water Inspection	6
Potable Water Inspection	17
Total # of Hygienic and Potable Facilities Inspection	23

Maintain Saskatchewan's air quality through airshed management, monitoring, use of good quality data, partnerships and national programs.

- Two air zones are currently operational in the Province. The Southeast Saskatchewan Airshed Association (SESAA) was incorporated in 2005 and the Western Yellowhead Air Management Zone (WYAMZ), developed for the Lloydminster-Saskatoon region, was incorporated in February 2012. SESAA and WYAMZ operate in a consensus-based manner at arms length from the Ministry with a mandate to collect and report credible air quality data to industry, environmental non-government organizations and the public.

- The Ministry is an active participant in air zone management meetings for SESAA and WYAMZ. The Ministry prepared monitoring plan/budget scenarios for WYAMZ and has finalized an emissions inventory of Saskatchewan air zones for SESAA, WYAMZ and the National Emissions Working Group. Grant agreements are in place for Air Zone Management (SESAA, WYAMZ) and the University of Saskatchewan Airways Research Group. (www.sesaa.ca and www.wyamz.ca)

- The Ministry continues to be an active participant in the development of the Canada-wide Air Quality Management System (AQMS). The Canadian Council of Ministers of the Environment (CCME) agreed on October 11, 2012 to implement the AQMS in 2013. All provinces and territories are required to delineate their jurisdictions into air zones by the end of 2013. A Cabinet Information Item regarding the AQMS was noted and agreed to by Cabinet in November 2012. The Ministry has delineated the Province into six air zones.

- The Ministry operated and maintained the Saskatchewan National Air Pollution Surveillance (NAPS) program and acid precipitation networks. Ministry staff has collected ambient air quality data at the Saskatchewan NAPS sites located in the cities of Regina, Saskatoon, Prince Albert and Swift Current and report online via the Ministry's website. NAPS data is used to calculate and report the Air Quality Index (AQI) on the Ministry's website. Environment Canada uses the data to report the Air Quality Health Index (AQHI). The AQI and the AQHI help inform Saskatchewan residents about how the local ambient air quality may impact them during their outdoor activities

- As part of the provincial collection program, precipitation has been analyzed on a weekly basis by the Alberta Innovates Lab since October 2011. The Ministry monitors wet deposition at seven Saskatchewan locations: Buffalo Narrows, Saskatoon, Points North, Cactus Lake, Hudson Bay, Fox Valley and Weyburn. Results to date do not indicate any adverse effects of acidic precipitation based on the pH and potential acid input levels. Continued monitoring in these regions is required to gain a better understanding of long-term trends.

Other Ministry activities included:

- Auditing of SaskPower's Estevan air monitoring station: The Ministry conducted a performance audit on SaskPower's ambient air monitoring site located in the City of Estevan on September 19, 2012. The objective of the audit was to assess the accuracy and quality of the overall monitoring program. The scope of audit was to evaluate analyzer performance for nitrogen oxides (NO_x), sulphur dioxide (SO_2) and particulate matter ($PM_{2.5}$). The scope also included a quality assurance review of station logbooks, historic calibration results, and previous maintenance records and repairs done to the equipment and the inlet systems at the station. Overall, the 2012

performance audit was satisfactory. Review of historic records strongly suggests that regular maintenance and calibration procedures of equipment have been followed. This provides for the legitimacy of the data obtained from this station since 2005. The NO_x and SO_2 analyzers performed well within the acceptable limits. However, $PM_{2.5}$ analyzer did not meet some of the audit requirements. As a result, recommendations were made for the $PM_{2.5}$ analyzer and for the overall air monitoring program at the Estevan station. The Ministry has published seven air quality reports and guidance documents on the Ministry website, in addition to preparing internal and external air quality reports and guidance documents.

- In 2012, the Ministry published:
  - Saskatchewan Air Quality 2000-2009 and Report Summary;
  - Saskatchewan Air Monitoring Laboratory;
  - 2010 Mobile Air Quality Monitoring Report;
  - Saskatchewan Air Monitoring Laboratory (fact sheet);
  - Saskatchewan Air Modelling Guideline;
  - Air Quality Monitoring Guideline Saskatchewan; and
  - Evaluation of Air Quality Monitoring in Southeast Saskatchewan Airshed for Years 2006-2010

- The Ministry has also posted 27 processed datasets for model input for air quality assessments. The purpose of these data sets is to make modelling more consistent and replicable across the Province. The Ministry delineated the Province into five zones for the purpose of air dispersion modelling. For each zone, the ministry prepared a series of fully processed AERMOD ready screening meteorological data sets that will be referred to as 'Regional Meteorological Data Sets' for air dispersion modellers to use. It is anticipated that the vast majority of the AERMOD[6] modelling undertaken in Saskatchewan will be completed using one of these Regional Meteorological Data Sets. Modellers pick the fully processed AERMOD ready data file that best represents the meteorology for the location of their site. The Regional Meteorological Data Sets contain five years of hourly meteorological data (~43,800 hours) representing the years 2003 to 2007. The use of the Regional Meteorological Data Sets will promote the use of AERMOD and all of its advantages (multiple sources, building downwash and more source types) over the screening models, SCREEN3[7] and AERSCREEN[8].

- The Ministry has developed a Regina-wide air monitoring plan aimed at identifying and measuring air pollutants in residential neighbourhoods. The Ministry initiated a comprehensive Regina-wide air quality monitoring study in July 2012, the first of its kind in Saskatchewan. The Ministry of Environment, along with the Ministry of Health, the Regina Qu'Appelle Health Region and the City of Regina are gaining a better understanding of Regina's air quality in the city's residential neighbourhoods by conducting an extensive air monitoring survey. This survey will provide baseline data for carrying out possible future monitoring studies, proactively identifying potential pollutant concerns before they become a problem and assisting with the establishment of additional permanent monitoring stations in the city. Different monitoring methods were used to collect monthly measurements at 18 sites for nitrogen dioxide (NO_2), ozone (O_3), sulphur dioxide (SO_2), hydrogen sulphide (H_2S) and over 25 different volatile organic compounds (VOCs). The Saskatchewan Air Monitoring Laboratory (SAML) was also deployed to collect real-time data at five different sites in the city on a scheduled rotation for particulate matter ($PM_{2.5}$), NO_2, O_3, SO_2, H_2S and over 150 VOCs. The monitoring program is currently ongoing. Once an entire year of data has been collected, the results will be published and made available to the public on the Ministry of Environment's website.

- The Ministry prepared a five-year report to examine the air quality data collected by the Southeast Saskatchewan Airshed Association (SESAA) from years 2006 to 2010, and to make recommendations to improve the air monitoring program in the SESAA. The final report made seven recommendations towards enhancing SESAA's air quality monitoring network. SESAA has incorporated all seven of the recommendations.

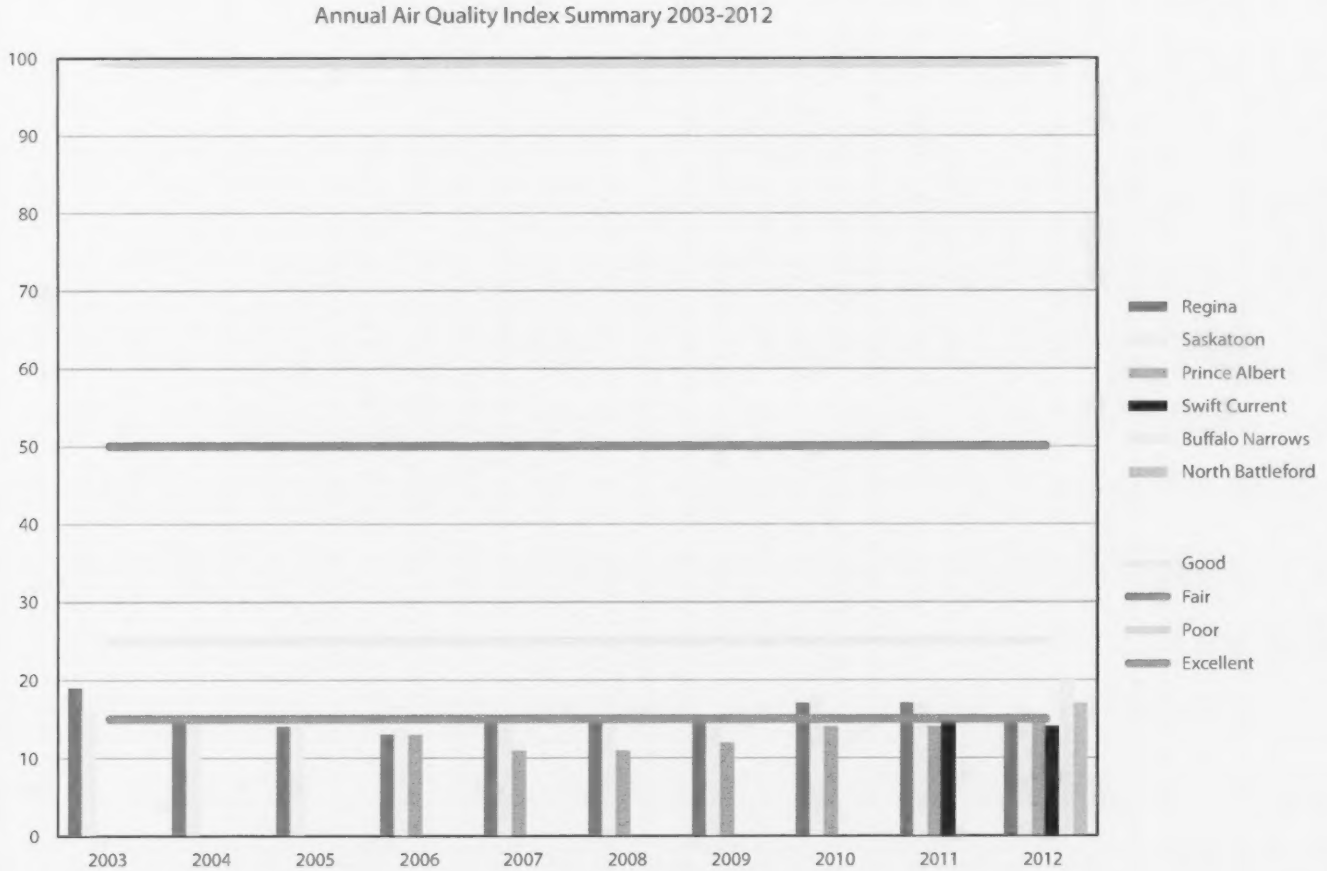
- The Ministry provided odour monitoring training to Industrial Branch Environmental Protection Officers on May 2012 in Saskatoon and Regina. As a result, Environmental Project Officers (EPOs) have a better understanding of odour management and a new air quality tool to better manage and resolve offensive odour complaints during field investigations.

[6] *Standards for American Meteorological Society/Environmental Protection Agency Regulatory Model*

[7] *SCREEN3 is a screening-level air dispersion model based on the US EPA the ISC3 (Industrial Source Complex) model. It is a single source Gaussian plume model which provides maximum ground-level concentrations.*

[8] *AERSCREEN is a screening-level air quality model based on the US EPA AERMOD model which estimates worst-case ground level concentrations for a single source.*

Progress in 2012 - 13



Source: Ministry of Environment, Technical Resources Branch 2013 (also available at www.environment.gov.sk.ca/airqualityindex)

The Air Quality Index (AQI) is a communications tool designed to describe the general air quality in urban areas by transforming ambient measurements of sulphur dioxide (SO_2), nitrogen dioxide (NO_2), ozone (O_3), carbon monoxide (CO) and particulates into a single number and descriptive term that represents the measured quality of air. The AQI is also used to monitor long-term trends in air quality. Measuring and evaluating urban air quality is an important step in meeting the Ministry's objective of ensuring clean air. Maintaining air quality is fully aligned with the Ministry's strategies to enhance environmental protection, improving our air quality and to improve transparency and accountability. This measure is an essential tool to monitor air quality trends and a basis for making comparisons of air quality in different urban areas. Saskatchewan's overall approach to managing air quality is through: permits issued pursuant to *The Clean Air Act / Regulations* and *The Potash Refining Air Emissions Regulations;* the environmental assessment process; air quality monitoring and reporting; ambient air quality standards; air dispersion modeling; airshed management; compliance and enforcement; and information and research.

The Ministry has established air monitoring stations in Regina, Saskatoon, Prince Albert, Swift Current, Buffalo Narrows and North Battleford. The Ministry recently relocated its air monitoring station in La Loche to Buffalo Narrows to better measure long-range acidic compounds in the atmosphere. In addition, a new air monitoring station was established in North Battleford in March 2012. The AQIs for Regina, Saskatoon, Prince Albert, Swift Current, North Battleford and Buffalo Narrows have consistently rated as good to excellent and there has been a relatively stable trend in this measure. The AQI in northern communities would be expected to be higher than in the south due to higher background ozone levels, higher particulate matter levels due to forest fires and human-caused emissions from open and wood stove burning sources.

The index summary graph provides the AQI for those stations that are a part of the National Air Pollution Surveillance Program.

Data for all sites is available at:
www.environment.gov.sk.ca/airqualityindex
The key risks to the AQI reported at the stations comes from both natural sources (such as forest fires) and from human-caused sources (such as open burning or air contaminants from industrial sources).

The Ministry will continue using the AQI to rank the Province's air quality as a tool in protecting the health of people and the environment from potential degraded air quality. Other provinces within Canada are making the transition to the Air Quality Health Index (AQHI), which will have greater focus on human health. For 2013-14, the Ministry will be making the transition to an hourly AQHI. In the meantime, the Ministry has conducted a pilot study in 2012-13 to compare both indexes and will review the data after one year.

Strategy – Ministry service is client focused.

Key Actions and Results

Ensure Ministry clients have multiple options to access services through channels such as the Client Service Office, online portals, in-person and telephone services.

- The launch of the new Ministry website in September 2012 has been designed to provide a better client centered experience by organizing information to meet the needs of various stakeholders and to ensure Ministry clients have multiple options to access services through channels such as the Client Service Office (CSO), online portals, in-person and telephone service.

- Clients have multiple options to access services, including enhanced web content such as a 'Contact Us' option to access the CSO via email and phone. The CSO started the 2012-13 fiscal year with a new "1-800" hosted contact centre phone system. The Ministry has also developed a knowledge base to provide accurate and consistent responses to general inquiries (receiving over 10,000 general inquiries in 2012-13). Client service standards related to what clients can expect from "1-800 service" and how long clients can expect to receive a response to their inquiry have been implemented. For example, 85 per cent of all calls to the Ministry's "1-800 service" during normal business hours will be answered live by a Ministry employee and every effort will be made to respond immediately to inquiries. If a full response cannot be made, the Ministry will provide a response by phone, e-mail, or fax within three business days.

- Walk-in client inquiries are always available; the CSO opened its doors as an alternate first contact option for clients. In addition, clients can continue to access field offices across the Province. Through the use of Microsoft Dynamics Customer Relationship Management (CRM) software, the Ministry can provide a general inquiry service in support of enhanced client service. Clients' inquiries are documented and tracked to resolution. As part of the implementation, more than 250 staff received extensive training in the use of CRM for general inquiries to program branches.

- The new Hunting, Angling and Trapping Licensing (HAL) system development plan and pre-implementation has been established. Phase 1 of HAL was completed for implementation in April 2013. This will result in improved client service by offering more options for the purchase of licences and improved information management for the Ministry.

Ensure the provision of safe drinking water through inspections, monitoring and reporting (at industrial facilities).

- Annual Reports for mining/industrial facilities are reviewed by Industrial Branch staff to ensure source water protection. Where impacts occur, Ministry officials advise clients to activate remediation measures or carry out additional monitoring. A total of 116 annual reports are reviewed annually.

Protect public safety by focusing wildfire suppression activity on protecting people as the highest priority.

- The Ministry of Environment focuses on working with local governments, northern residents and stakeholders to provide education and support to enable them to understand and take responsibility to protect themselves from the risks of wildfires.

  Protection plans are reflective of the values (human, land, etc.) threatened and the potential beneficial aspects of each wildfire. Decisions balance the risks wildfire poses to all values, with the capability to provide protection in a given situation. Safety and protection of human life and communities from wildfires remains the top priority.

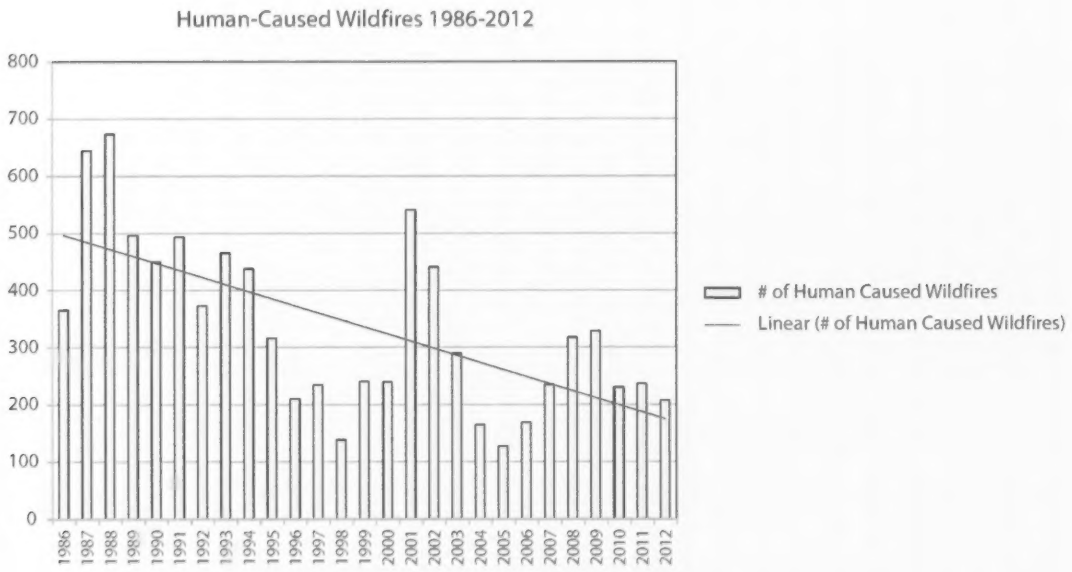
  The program's strategic approach includes an awareness and education component that encourages the voluntary incorporation of wildfire mitigation (FireSmart) principles. This concept establishes wildfire mitigation as a shared responsibility of all users and stakeholders in the Saskatchewan northern provincial forest, providing provincial expertise for education in applying FireSmart principles in remote and wildland urban interface settings.

- The public reported 127 fires or 31 per cent of the total number of fires for this year. The 10-year average for public reporting is 30 per cent (2003-2012). There were 409 wildfires in 2012:
  - 207 were human-caused (51 per cent) and 202 were lightning caused (49 per cent).
  - The total area burned is 227,528 hectares. The 10-year average is 548,892 hectares.
    There were no community evacuations, no fatalities and no major infrastructure burned. There was a single evacuation due to wildfire when a uranium mine in northeastern Saskatchewan was evacuated for three days as a precaution.

- In 2012/13 the Wildfire Management Branch completed the following projects to increase awareness of wildfire risks:
  - Community fuels management projects (on crown land) took place in three communities. Two projects were provincially funded and managed. One was initiated by a local outfitting lodge owner.
  - The Branch set up a contract with the Saskatchewan Forestry Association to develop web-based wildfire related school curriculum modules.
  - A comprehensive Fire Awareness Campaign advertising plan for 2012 through print, radio and online media focused on four themes: Spring/Fall Burning, Residential Property Protection, First Nation Fire Awareness and General Fire Awareness. Smokey the Bear made a total of 63 appearances resulting in 11,197 contacts.
  - Two FireSmart assessments were completed for new developments.
  - Three community FireSmart presentations were given to local councils and residents and one FireSmart risk assessment and recommendations provided for a forestry mill site.
  - The Wildfire Management Branch assists communities in the development of wildfire pre-plans for high risk communities. Each fire management area has been asked to do three such community plans per year.
  - A total of 12 new Wildfire Hazard Level Signs were placed in strategic locations, and roadside signs were developed to explain wildfire history and fire disturbance.
  - The Wildfire Management Branch is represented on the forestry development team to provide FireSmart input into new forest management plan development.

- The Wildfire Management Branch co-ordinated and contributed to the Saskatchewan Resource Ranger (SRR) program where there were 55 graduates from five communities who completed the Basic Fire training. The branch also assisted in the instruction of the Fire Prevention 402 class to Saskatchewan Institute of Applied Science and Technology (SIAST) students taking the Resource Environmental Law and Forest Ecosystem training courses.

Progress in 2012 - 13



Source: Ministry of Environment, Wildfire Management Branch

The Ministry of Environment's wildfire education and awareness efforts are designed to reduce the percentage of human-caused wildfires by encouraging individuals to recognize their responsibility for mitigating the risk of wildfire around communities, industrial sites and recreational leases. This is done by providing people with the information they need to be aware of the risks of starting a wildfire and using fire safely. Increasing this awareness is intended to reduce the percentage of human-caused fires, which typically occur closer to communities and resort properties, where more people are located. The Ministry continues to focus effort on education in northern communities.

Historically, the number of human-caused wildfires has been just over 50 per cent of the total number of wildfires actioned in any year. An historical performance measure was to reduce the percentage of human-caused wildfires by five per cent per year down to a target of 40 per cent per year overall. There are some recognized challenges with this measure as human-caused wildfire statistics include: restarts; a large percentage of wildfires Coded to "unknown" causes; and vehicle and industrial fires. These cause difficulties in utilizing historic and current information for analysis. In 2012, human-caused wildfires accounted for 51 per cent of all wildfire starts across the Province. This is in line with the 10-year average of 54 per cent. The variability of human-caused wildfires as compared to overall wildfire starts ranges from 39 per cent to 79 per cent over the past 10 years. Weather is the only direct correlation between the number of wildfires started by lightning and those that are human-caused. Weather has the greatest impact on both, but for different reasons. Hot and dry weather patterns allow for easier human caused fire ignitions, resulting in more accidental and preventable human-caused starts. Lightning starts are also weather dependent but are not preventable. Evaluating the increase or decline of human-caused wildfires as a performance metric is difficult. Long term trends show that human-caused wildfires have decreased overall. There were 207 human-caused wildfires, below the 10-year (254), 20-year (286) and 25-year (339) averages. The Ministry continues to work towards better information gathering techniques to analyze data and incorporate the results into future planning for reducing human-caused wildfires.

Progress in 2012 - 13

Government Goal: Making Life Affordable

Strategy – Impacts on the environment are minimized

Key Actions and Results

Continue to identify, protect and manage sites within the Provincial Representative Areas Network.

- The Government of Saskatchewan continues to work towards completion of the Representative Area Network (RAN) which will result in protection of at least 12 per cent of the Province. Representative areas act as reservoirs of biological diversity and as benchmarks for comparison with more heavily-utilized landscapes outside of the network.

Reduce greenhouse gas emissions and increase capacity to adapt to the impacts of climate change, while accommodating economic growth, through promoting investment in low-carbon technologies and supporting the development of cost-effective mitigation and adaptation solutions.

- The target date for completion of the Provincial Regulatory Framework is 2013. The Ministry is establishing the provincial policy and regulatory framework for reducing greenhouse gas (GHG) emissions including:
  - *The Management and Reduction of Greenhouse Gases Act;*
  - *The Management and Reduction of Greenhouse Gases Amendment Act, 2012;*
  - *The Management and Reduction of Greenhouse Gases Regulations;* and,
  - Baseline Emission Level and Annual Return Chapter of the Code.

  The Ministry has amended *The Management and Reduction of Greenhouse Gases Act* to include a provision for public requests for an investigation of alleged offences as required under CEPA to negotiate a Canada/Saskatchewan Equivalency Agreement. Legislative amendments required in order to support proclamation of the climate change legislation and enactment of the GHG regulations are expected to be completed in 2013.

  The development of the Baseline Emission Level and Annual Return Chapter of the Saskatchewan Environmental Code sets out additional rules for regulated emitters for establishing their baseline emission level and annual returns; this Chapter will come into effect when the GHG Act is proclaimed.

- The Federal Government is developing sector-by-sector performance standards to address climate change. The federal *Reduction of Carbon Dioxide Emissions from Coal-fired Generation of Electricity Regulations* have already been released, and the Ministry is involved in ongoing discussions on the development of standards in other sectors including oil and gas, nitrogen fertilizers, iron and steel, potash, among others. A Canada/Saskatchewan Equivalency Agreement is currently being negotiated by the Province and the Federal Government so that the Province will regulate industry in the Province. This is expected to occur before any federal regulations would come into effect.

- The target date for completion of the Provincial Offset System is December 2013. This will enable regulated emitters to meet a portion of their compliance obligations through trading of offset credits in a provincial registry. Activities in progress include:
  - Complete technical reviews for draft offset protocols which will be finalized once stakeholder engagements occur.
  - Develop a framework to ensure offset projects are verified to a reasonable level of assurance.
  - Establish a provincial offset registry to serialize, track and retire offset credits.
  - Develop guidance documents for offset project and protocol development.

- Facilities that emit less than 5,000 tonnes of GHG annually are considered to be non-regulated emitters. GHG emissions from non-regulated activities account for about 70 per cent of total provincial emissions.

- Emissions from non-regulated facilities and sectors will be reduced through policies and programs that promote adoption of low-carbon technologies, energy efficiency and conservation and renewable energy sources. A review of emission reduction opportunities and best practices is being undertaken by the Climate Change Branch to identify cost-effective GHG abatement solutions and policy measures that could be implemented at non-regulated facilities to meet provincial targets.

- Climate Change Branch is developing policy initiatives and incentives to reduce GHG emissions in sectors such as oil and gas, mining, transportation, agriculture, commercial enterprises, and urban and rural communities. Negotiations with non-regulated emitters are underway to establish GHG emission reduction targets, and GHG reporting requirements for their facilities. These include:
  - Performance agreement with the Canadian Association of Petroleum Producers (CAPP), the Ministry of the Economy, and the Ministry of Environment to reduce GHG emissions from flaring and venting in the upstream oil and gas industry.
  - Municipal performance agreements with the City of Saskatoon, the Saskatchewan Urban Municipalities Association (SUMA), and other urban municipalities to reduce GHG emissions in municipal operations and facilities through investments in innovative technologies and processes, energy efficiency and conservation, fuel switching and benchmarking of best practices.

  The initial performance agreements with non-regulated emitters including the oil and gas industry and urban municipalities will be implemented when the climate change legislation and regulations are proclaimed, which is expected to be in fall 2013.

- The Ministry continues to administer the Go Green Fund to promote research, demonstration and adoption of low carbon technologies. Results and activities in progress include:
  - The annual Go Green Fund budget has been reduced to $4.5M in 2012-13 from $17.5M in 2011-12. This is because the total four-year commitment of $70M expired in 2011-12. In fiscal year 2012-13 the Go Green Fund managed 20 ongoing research, development and incentive projects in GHG reduction, biodiversity conservation, water conservation, waste reduction and education and awareness priority areas. Ongoing projects include:
  - Aquistore – the carbon capture and storage demonstration project in southeast Saskatchewan, near Estevan;
  - A wood pellet distributed energy project with Meadow Lake Tribal Council;
  - Landscape connectivity project with Saskatchewan Wildlife Federation, Nature Conservancy of Canada and Environmental Systems Assessment Canada; and
  - High wind storage project with Cowessess First Nations.

  Projects successfully completed in 2012-13 include:
  - Ground Effects Environmental industrial wastewater treatment demonstration with EVRAZ;
  - Net Metering rebate pilot project; and
  - Provincial toilet replacement Program with the Water Security Agency.

  The Go Green Fund has tracked environmental outcomes associated with each project. Notable environmental outcomes include nearly 4.5 billion litres of water saved and about 13,000 tonnes of GHGs reduced from the Provincial Toilet Replacement Program, nearly 50,000 tonnes of GHGs reduced from the Energy Efficiency for New Homes Rebate Program and about 1.3 million litres of water saved through the Ground Effect Environmental industrial wastewater treatment project. The Go Green Fund will continue to collaborate with current contractors and stakeholders to identify further opportunities for investments in low carbon technologies and to maximize third party funding.

- The Ministry continues to lead development of the provincial climate change adaptation strategy including:
  - Collaborating with the Water Security Agency (WSA) to manage Saskatchewan adaptation planning initiatives.
  - Participating on the national steering committee for Natural Resources Canada's Adaptation Platform to address priority adaptation issues in the mining, energy, water resource management and forestry sectors. Three major studies to develop risk management tools that build industry capacity and resilience in responding to extreme weather events and long-term climate change impacts are being undertaken with the WSA, the Saskatchewan Research Council, the Saskatchewan Mining Association and SaskPower.

Ensure that development and industrial activity proceed in a manner that protects the environment and human health and safety through environmental assessment and compliance activities.

- Proclamation of *The Environmental Assessment Amendment Act, 2010* occurred on November 7, 2012. Proclamation of the Act empowers the Minister to legally determine whether a proposed project is a 'development'. The Ministerial determination provides more legal certainty to project proponents and will provide opportunities to enhance the enforceability of desired outcomes through terms and conditions. Amendments to the Act have increased financial penalties for non-compliance and reinforced the courts' ability to order the repair or restoration of environmental damage. Financial penalties have been significantly increased from $5,000 to $500,000, which provides a strong incentive for compliance.

- The conditions management process, which began full implementation in July 2012, ensured proponents address potential adverse effects on the environment by developments and the measures undertaken to mitigate

these effects. The new compliance process requires proponents to complete a commitments register as part of an Environmental Impact Statement (EIS) that is submitted to the Environmental Assessment (EA) Branch for review.

- The branch continues to work with proponents to ensure developments proceed in an environmentally acceptable manner. The EA Branch received 29 applications from April 1, 2012 to March 31, 2013. Proponents also submit an annual report on the status of terms and conditions related to EA approvals to ensure compliance is being achieved and tracked by the appropriate regulatory agency. A reduction in number of low risk projects has allowed increased focus on larger scale and high risk projects ensuring they are adequately planned and developed in a manner which protects the environment and human health.

- Industrial Branch is in the process of developing an Environmental Performance Reporting (EPR) Guide designed to provide a reference for regulated entities to effectively report on achieving their environmental protection commitments. The second draft was sent to stakeholders for review and comment and the approved EPR guide is expected to be finalized in June 2013. Industry subject to these guidelines will be better able to meet Ministry expectations with respect to environmental performance reporting, and provide better information regarding effects on the environment from their operations.

The 2012-13 Ministry Compliance Plan is underway and the 2013-14 branch compliance plans are currently under development. A total of 122 compliance inspections have been undertaken at mining and industrial facilities. Action items and recommendations are issued following inspections with timelines for completion for higher risk issues.

Notices of Violations were issued to two clients at the time of inspections to identify and rectify infractions. The clients have followed up on the issues and have carried out the required corrective action.

The Industrial Branch conducts inspections over and above mining and industrial facilities and those inspections include:

Type of Inspection	2012-13
Mining/Industrial Assigned Operating Facilities (includes landfarms)	122
Decommissioning and Reclamation - Mining or Industrial	4
Declamation - Impacted Sites	1
Abandoned/Closed Mine/Industry	8
Hazardous Substances and Waste Dangerous Goods (HSWDG) Storage	1
Other/Miscellaneous	3
Landfills and Transfer Stations	201
Total Number of Inspections	**340**

Ensure effective solid waste management via landfills, transfer stations and recycling programs.

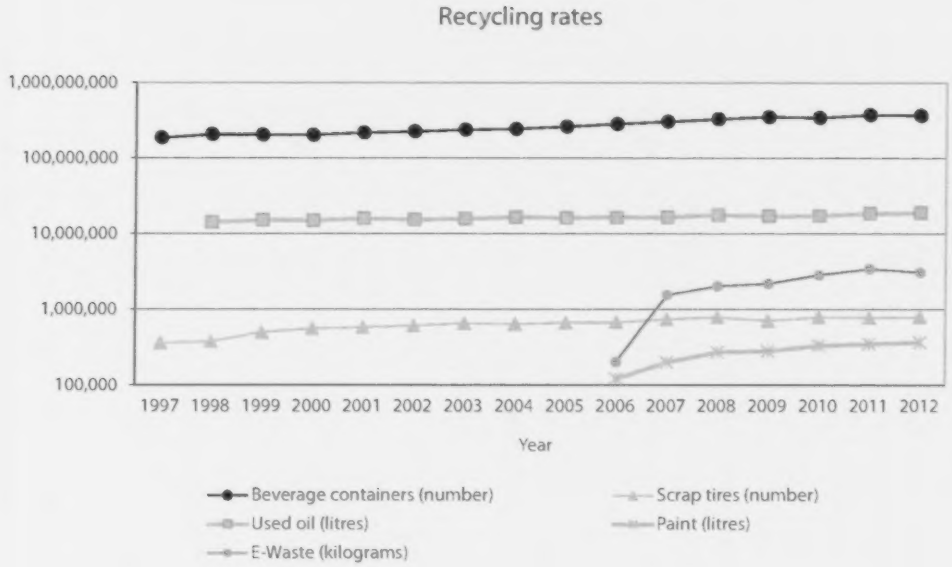
- During 2012-13 fiscal year, 201 landfill/transfer station facilities were inspected for compliance, and 19 new permits were issued to facilities.

- The landfill and transfers station Code chapters were developed and are currently being reviewed by the Legislation and Regulation Review Committee (LRRC) prior to their proclamation. Environmental Management Protection General Regulations were also developed to fill certain requirements not captured in the respective Code chapters. These are also currently being reviewed by LRRC. Supporting documents like Frequently Asked Questions, Quick Reference Guides and specific one page documents stating current and proposed landfill/transfer station requirements were developed to facilitate understanding of these Code chapters. These documents are currently accessible to the public.

  During June 2012, the Ministry participated in SARM's regional workshops held at six different locations across the Province and made presentations about the Code and effective solid waste management. In February 2013, the Ministry participated in the Saskatchewan Urban Municipalities Association (SUMA) convention during their "Ask an Expert" session and provided responses to questions asked by municipalities.

- Negotiations with a number of stakeholders with regard to the enactment of *The Household Packaging and Paper Stewardship Program Regulations* continue with progress being made. Throughout 2013-14 industry, municipalities and the Ministry will be working to develop the packaging and paper program's operational plan with an implementation goal of early 2014.

Progress in 2012 - 13



Sources: Third Party Organizations Annual Reports (i.e., Saskatchewan Paint Stewardship Program, Saskatchewan Scrap Tire Management Program, Saskatchewan Used Oil, Filter & Container Recycling Program, and Saskatchewan Waste Electronic Equipment Program
Notes: Beverage containers and e-waste are based on a fiscal year. The fiscal year 2008-09 is represented by 2008. All other data is based on a calendar year

Recycling is an indicator of the public commitment to waste minimization and indicates shared responsibility for environmental stewardship. The Ministry administers the enabling regulations for four industry-led stewardship programs and oversees a fifth program, the Beverage Container Collection and Recycling Program, through a contract with SARCAN, the Saskatchewan Association of Rehabilitation Centres' recycling division. The recycling indicators report on the actions of the Ministry and its stewardship programs in preventing and reducing risks to human health, the environment, and to expanding solid waste management and recycling programs in the Province.

Industry-led recycling programs report to the Ministry on an annual basis; therefore, performance numbers are combined within the entire year's reporting period. At the end of 2012-13, waste electronics, used oil and waste paint programs reported increases in collection rates. Rates of recyclable material collected are expected to continue to increase due to the growing economy.

Market conditions, public commitment and good stewardship practices determine the recycling rates. Excluding refillable beer bottles, recovery rates for program eligible beverage containers was approximately 82 per cent in 2012-13 which resulted in $41.5 million in deposits returned to Saskatchewan residents.

Over 366.8 million deposit containers were collected by SARCAN Recycling. Through this program the Province collected $73.3 million in Environmental Handling Fees and Deposits.

The expansion of waste electronic products collected from the industrial, commercial and institutional sectors as well as the Ministry's efforts to develop a Multi-Material Recycling Program (MMRP) and Agricultural Plastics Recycling Program are expected to increase recycling rates in the future. As it was, e-waste collections rose 21 per cent from the previous record year in 2010.
The number of scrap tires captured increased from the previous year. The Saskatchewan Scrap Tire Corporation reported collecting and recycling 790,791 tires in 2012, up 1.9 per cent from 2011.

The Saskatchewan Association for Resource Recovery Corporation reported that it collected and recycled 18.9 million litres of used oil (up 1.5 per cent from 2011), 460,000 kilograms of plastic oil containers (up 10.2 per cent), and 2.1 million oil filters (up 1.5 per cent).

The Saskatchewan Paint Stewardship Program again saw an increase, growing collections by almost six per cent, with 367,478 litres of waste paint collected and recycled.

Key risks to maintaining or increasing recycling rates include market conditions (such as the value of recyclable materials and access to purchasers of recyclable materials), sufficient funding sources for recycling programs and sufficient public commitment (as illustrated through participation in recycling efforts and support for recycling fees and levies).

Progress in 2012 - 13

Government Goal: Responsive and Responsible Government

Strategy – Information about the environment is timely, accurate and readily available.

Key Actions and Results

Credible measurement, reporting and verification data are available on the ministry's website.

- The launch of the new Ministry website in September 2012 has been designed to provide a better client-centered experience by organizing information to meet the needs of various stakeholders. Ministry branches are working with Communication Services Branch to continue developing and updating the Ministry of Environment website to improve access to information for clients.

- The new website houses the Environmental Assessment (EA) Branch guidance documents, information on projects currently under review and an archive of past projects which underwent environmental assessment ensuring a transparent process easily accessible by all stakeholders including the public, industry clients and others.

  The EA Branch is participating in a ministry-wide initiative that will result in multiple options for clients to access services. Website revisions were completed and approved in September 2012. Guidance materials were posted to the website July 2012 with final revisions to documents completed and posted in November 2012.

- The Industrial Branch is working with Communication Services Branch; Information Technology/Information Management (IM/IT) to ensure the Ministry website includes provisions to incorporate impacted sites program information, online applications and enhanced effectiveness of SaskSpills. The impacted sites information (ISIS) database and registry development which is intended to provide a greater amount of publicly accessible data, is underway and will be integrated into Customer Relations Management (CRM) as part of the RBR and Business Transformation process. The development of an internal inspection protocol document, as identified as a requirement in the business transformation project, was completed.

- Three Industrial Branch specific online applications and General Document Submissions for the Branch were developed and will be available to the general public mid-June 2013. The Industrial Branch and Municipal Branch with the Water Security Agency developed two online applications which are used jointly between the two parties and will also be available mid-June 2013. The website will accommodate an Information System to track impacted sites through the new CRM system and will begin implementation mid-June 2013. The new system, once fully functional, will track and document all spills and status of resulting impacted sites and applicable information will be made available to clients online. Currently spill information is available on the SaskSpills website.

- The Forest Service has sponsored two RBR IM/IT projects:
  - The Scaling Information Management System (SIMS) project, which will see the development of an interactive web-based system both industry and Government can use to centralize the collection, calculation and reporting of wood measurement information;
  - The Spatial Data Project, which will develop a central geo-spatial data repository. The repository will enable the Ministry to meet its defined obligations with the forest industry, ensure the availability of good geospatial data for good decision making, improve the efficiency in use of Information Technology and people resources and provide for increased data security.

- The Fish and Wildlife Branch is currently reviewing website content to improve service delivery. The Branch implemented the use of Kestrel and iMapInvasives and upgraded the Biotics platforms to provide mechanisms for data submission and information sharing as well as the SharePoint platform to manage information flow within and from the Fish and Wildlife Branch. Initial implementation of a SharePoint platform to enhance intra/inter branch communication has also been adopted. The branch has applied the use of new technologies such as tablets and CapturX pens in field data collection routines. Apart from SharePoint, these platforms are unique to the Ministry but can be utilized by external and internal agencies.

- Wildfire Management's current Ministry site is updated daily as required for operational requirements. The branch is working on an improved Ministry SharePoint site where data and information can be accessed by Ministry staff. The branch identified an updated and improved website/social media interactive solution for public reporting as part of the Business Transformation outputs in 2012.

Strategy – People, businesses and communities understand, support and comply with environmental regulations

Key Actions and Results

Finalize the development and implementation of the Ministry's Compliance and Enforcement Plan in a manner that supports the results-based regulatory framework.

- The Ministry's Compliance and Enforcement Planning Template has been finalized and branches are currently drafting their respective plans to feed into the Ministry Compliance Plan for 2013-14. Risk assessment and performance measurement information is also under development to support evaluation of the Ministry's Compliance Management Framework. The Ministry's compliance risk assessment for 2013-14 was completed in February 2013. Branch Compliance Plans were completed by March 31, 2013. It is anticipated that the 2013-14 Ministry Compliance Plan will be finalized in mid-2013. The Compliance Review team and Compliance and Field Services Branch will review progress and submit mid-year and year-end reports to be shared with the Provincial Auditor and Ministry Executive as required.

- The contents of the 2013-14 approved Forest Service Branch compliance plan have been communicated internally to Forest Service staff for awareness and implementation of the plan. The Branch compliance plan has been aligned to the Branch Strategic Planning and Business Management Accountability System. Work has begun to look at risks and associated mitigation action for the 2014-15 plan.

Develop and deliver educational materials and workshops on the new environmental regulatory framework.

- The Code is currently under review by the Legislation and Regulation Review Committee. Changes to the Ministry website have enhanced clarity of key messages regarding RBR and the Code. These are now in a more prominent position on the website. Branch material is being updated and developed in preparation for Code implementation. The Ministry has revised fact sheets and relevant information applicable to Municipal Branch Code chapters.

- Ongoing meetings continue with external stakeholders to share information on the Code. The Ministry conducted an online survey of the various committees involved in the development of the Code (Code Development Committee, Code Content Committees and Qualified Persons Advisory Committee). Based on a 31 per cent response rate, a report was generated and will be used to guide future Code development.

- Forest Service will undertake implementation activities once the Code is adopted and the amendments to The *Forest Resources Management Act* are proclaimed. An educational plan has been prepared by the Forest Service Branch for delivery soon after the Codes become law. It was developed as part of the Ministry's Code implementation plan.

- Industrial Branch staff has delivered presentations on the new environmental regulatory framework and the Environmental Code to the Saskatchewan Environmental Industry and Managers Association (SEIMA), the Association of Professional Engineers and Geoscientists of Saskatchewan (APEGS), and other stakeholders groups throughout the Code development process. The branch has developed a Code implementation strategy and consultation plan that will provide additional educational opportunities, presentations and workshops to stakeholders once *The Environmental Managementand Protection Act, 2010* is proclaimed and the Saskatchewan Environmental Code comes into effect.

Strategy: The Ministry seeks better ways to do things.

Key Actions and Results

Review, prepare and implement a modern wildfire management act to better manage provincial wildfire activities.

- The Wildfire Act is now in final stages of internal and external consultation processes. Wildfire Management Branch participates and leads national development of various wildfire-related initiatives in order to ensure best practice standards, policies and practices across Canada. Public consultation on the Act began in June 2012. To date, internal and external Government consultations have been completed in addition to 29 stakeholder meetings, including four Métis meetings (in the north, Métis and public meetings were combined). In addition, participation in inter-provincial forums at the technical and policy development level to help ensure that environmental protection and resource management programming and requirements are current, consistent and defendable.

- Wildfire Management Branch staff represented Saskatchewan on various national committees as subject matter experts including: Wildfire Science, Prevention and Mitigation, GIS, Meteorology and Operations; and the Canadian Council of Forest Ministers Fuels Management Task Group, a national committee tasked with the development of a multi-agency fuels management strategy with the following deliverables:
  - Survey the extent and causation of hazardous fuels across all fire management agencies and the extent of current fuels management programs and policies intended to reduce fuel hazards and wild land fire risk. Completed Wildfire Management portion of the national survey.
  - Develop a strategy for sharing best management practices and forest planning policies and expanding fuels management initiatives across interested fire management agencies. Plans are in place to host two webinars and a national Fuels Management Workshop in 2013-14.
  - Engage industry and researchers in the development of unique alternatives to help mitigate costs of fuel treatment.

Apply Lean Principles to lead to efficiencies in the delivery of ministry services.

- In April 2012, the Ministry initiated a Lean process to improve the Ministry's annual land disposition invoicing process and reduce the amount of time it takes to produce an accurate invoice. The new process has eliminated duplicate approval steps, added greater consistency and streamlined the process resulting in efficiencies. Over the next few annual invoicing cycles the turn-around time will continue to be tracked for ongoing improvements in efficiency.

- In July 2012, the Environmental Assessment (EA) Branch implemented a mandatory conditions management process developed during RBR business transformation activities. The EA Branch received 29 applications from April 1, 2012 to March 31, 2013. Implementation of changes developed during the Lean exercise and RBR business transformation activities have successfully reduced the number of low risk proposals being reviewed in the branch, as reflected in a 68 per cent decrease in screening level reviews following July 1, 2012 compared to the previous year.

- Standardizing the process for ministerial referrals by introducing electronic referrals has reduced wait time for processing, approval and overall response time to inquiries. This has resulted in increased capacity for staff.

- Other Lean events include a value stream mapping (VSM) event of the Crown resource land disposition cancellation documentation process to reduce wait time for approval of cancellations for non-payment by at least 90 days, and a VSM event for Mobile Air Monitoring.

- In addition to implementing Lean principles, the Ministry is undergoing a core program review to ensure effectiveness and efficiency of programs and services. The Ministry is currently in year one of a four-year program that will streamline processes and enhance information to the public to ensure the best use of public funds. Progress on the core program review will be reported in the 2013-14 Annual Report.

Strategy – Programs and services are effective, efficient and regularly evaluated.

Key Actions and Results

Review processes used for land use planning.

- Lands Branch is reviewing planning in legislation administered by the Ministry in addition to resource land use planning and decision making to be reported in the 2013-14 Annual Report.

Evaluate field office locations and staff capacity to optimize delivery of ministry programs and services.

- Conservation officer numbers were maintained despite the office closures at Moosomin, Pelican Narrows and Cumberland House. By relocating the conservation officer staff to neighbouring field offices, the Ministry maintains quality field service delivery from the 44 remaining offices. Generally, there has been public acceptance to the reduction of field office locations. In 2012-13, there has been no noticeable increase in complaints from the areas where the three offices were closed.

Maintain the Environmental Management System certification through continual improvement of the forestry program activities, products and services.

- The Forest Service Branch has improved transparency and accountability to forestry matters. The 2012 Report on Saskatchewan Forests was released to the public in January 2013.

- The Forest Service Branch ceased third party certification to the ISO14001 Environmental Management System standard on October 12, 2012. As of April 1, 2013 the Forest Service Branch will be implementing a strategic planning and business management accountability system that is aimed to achieve defined desired forest outcomes.

Strategy: The Ministry uses information and knowledge effectively.

Key Actions and Results

Establish certificates and/or designations for technical and scientific positions in conjunction with the appropriate association.

- Discussions have taken place with the Association of Professional Engineers and Geoscientists of Saskatchewan (APEGS) through the Academic Review Committee regarding engineering licenses and other designations. APEGS is expecting a large influx once the legislation is proclaimed.

- Fish and Wildlife biologists are considering investigating associate certification with respective Fisheries and Wildlife Society associations Ministry staff are currently members of. Staff are participating in a number of forums at both technical and policy levels: Northern Sage Steppe Initiative; Western Association of Fish and Wildlife Agencies; Wildlife Society; American Fisheries Society; Prairie Habitat Joint Venture; the North American Waterfowl Management Plan, and the Caribou Range Plans Working Group. Fish and Wildlife staff continued to participate in professional organizations (The Wildlife Society; American Fisheries Society) and in a number of professional development activities. These activities help to ensure that staff stays abreast with current fish and wildlife management science and practice of direct relevance to their work.

Participate in inter-provincial forums at the technical and policy development level to help ensure that environmental protection and resource management programming and requirements are current, consistent and defendable.

- Forest Service Branch participates in a number of committees, forums and processes which support our programs. The Branch has representatives on the Intergovernmental Network which guides the work of the Canadian Council of Forest Ministers (CCFM). The Branch has representatives on the Climate Change Task Force and the Forest Pest Working Group. The Climate Change Task Force developed and released six reports dealing with vulnerability assessment and organizational readiness. The Task Force was extended for one year to complete the remaining three reports and to undertake knowledge exchange activities.

  The branch had representatives on the National Forest Sinks Committee which deals with the carbon emissions and sequestration within Canada's forests due to forest management. The Committee has provided province-specific information which will help to deal with these issues. Participation related to Insect and disease includes: The CCFM Forest Pest Working Group; The National Forest Pest Strategy Technical Committee; and the Canadian Food Inspection Agency-led Decision Support Framework for Invasive Alien Species Task Force (and associated Memorandum of Understanding).

- Lands Branch continues work with the petroleum industry and the mineral exploration industry. For 2012-13 there have been three meetings of the Saskatchewan Petroleum Industry and Government Environment Committee (SPIGEC) as well as two meetings of the Saskatchewan Mineral Exploration and Government Advisory Committee (SMEGAC).

- Industrial Branch participates in a number of committees, forums and processes to support programs including: monitoring progress of the CCME Task Groups to provide representation and input as required for groups such as Soil Quality Guideline Task Group; and completing a 10-year review of the federal *Metal Mining Effluent Regulations.*

  The branch represented Ministry interests at a kickoff meeting to ensure the focus of the review is on environmental protection and site specific information gathering. Working sub-groups are currently being formed. The goal is to ensure that decisions made will be in the best interest of Saskatchewan, and avoid unnecessary burdens being placed on mining operators in the metal, diamond and coal sectors with little benefit. The branch is a member of the Canadian Standards Association (CSA) group developing standards for the nuclear industry including uranium mining in addition to establishing standards for environmental monitoring, fire protection systems air emissions in order to avoid duplication of regulatory regimes and promoting harmony between federal and provincial regulators. The Western Interagency Environmental Emergencies Committee (WIAEEC) was inactive this year. The Canadian Council of the Ministers of Environment Soil Quality Guidelines Task Group (CCME SQGTG) met and developed new tools and guidelines to ensure current best practices and science are being used in contaminated sites management.

- The Fish and Wildlife Branch participated in an inter-provincial technical partnership with Alberta regarding sage grouse recovery. The Northern Sagebrush Steppe Initiative (NSSI) provides a forum for technical and policy development level discussion and decision-making between Alberta, Montana and Saskatchewan to ensure resource management programming and requirements are met.

  Members of the branch participated in senior level committees on inter-jurisdictional issues including: The NSSI; Western Association of Fish and Wildlife Agencies; Wildlife Society; Prairie Habitat Joint Venture; the North American Waterfowl Management Plan; and the Caribou Range Plans Working Group. A new five-year Memorandum of Understanding was signed with Alberta and Montana to continue NSSI. Policy solutions around common issues were identified. Program funding from other jurisdictions was influenced in supporting and furthering Saskatchewan initiatives. Policy was also developed around common inter-jurisdictional issues to better manage Saskatchewan's natural resources.

2012 - 13 Financial Overview

The Ministry's approved appropriation for 2012-13 was originally $185.1 million but was restated to $184.9 million as per Volume 1 of Public Accounts. Total 2012-13 expenditures were $174.4 million, a variance of $10.5 million from the Ministry's restated estimate. This under-expenditure was mainly due to savings associated with vacant positions and operational savings in Wildfire Management Branch and the Green Initiative Program.

The Ministry's budgeted revenue was $50.2 million for 2012-13. Actual revenue recorded by the Ministry in 2012-13 was $59.9 million. This variance of $9.7 million was due to an increase in the number of exports of aircraft and personnel to other provinces and the United States for recoverable fire suppression; an increase in unredeemed bottle deposits; and a refund of unused grants.

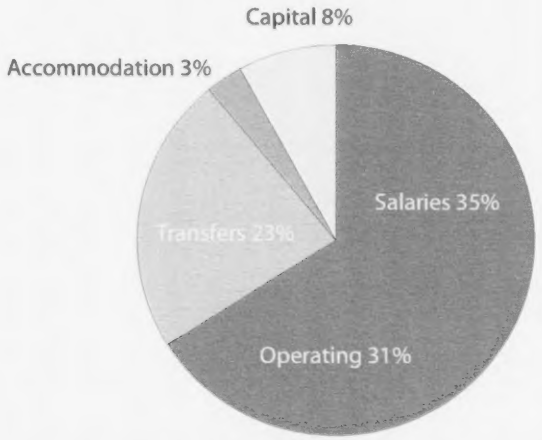
The Ministry of Environment's 2012-13 FTE budget is 892.0, which is net of a 36.6 FTE reduction associated with the transfer to the Water Security Agency which was assigned in-year from the 2012-13 unallocated balance. The variance to budget number of 8.3 FTEs compares 2012-13 actual FTEs to the 2012-13 final FTE budget.

The Ministry of Environment is responsible for the Fish and Wildlife Development Fund. Explanations and financial statements for the fund are found on pages 53-54.

The Ministry's new organizational structure was effective as of January 17, 2013, however as implementation did not occur at the same time, with the exception of the transfer to the Water Security Agency, the 2012-13 financial reporting reflects the previous Ministry structure.

Expenditures

The Ministry's restated appropriation for 2012-13 was $184.9 million, including projected capital expenditures of $14.3 million. The Ministry's total restated expense budget (excluding capital asset acquisitions) for 2012-13 was $178.3 million, including an amortization expense of $7.7 million. The total 2012-13 actual expenses were $169.1 million including all expenses associated with the transfer to the Water Security Agency. This represented a variance of $9.2 million from the restated estimate.



The following table outlines information on actual and budgeted expenditures by subvote and subprogram. Explanations are provided for all variances that are greater than 10 per cent.

	2011-12 Actual Expenditures ($000s)	2012-13 Approved Estimates* ($000s)	2012-13 Actual Expenditures ($000s)	2012-13 Variance ($000s)	
Subvote					
EN01 Central Management and Services					
Minister's Salary	45	47	47	-	
Executive Management	1,540	1,602	1,288	(314)	1
Central Services	9,683	9,427	9,780	353	
Accommodation Services	5,492	5,609	5,273	(336)	
Subvote Total	16,760	16,685	16,388	(297)	
EN06 Climate Change					
Green Initiatives	10,147	4,500	1,487	(3,013)	2
Green Initiatives- SARCAN	1,800	-	-	-	
Climate Change Program	616	934	927	(7)	
Subvote Total	12,563	5,434	2,414	(3,020)	
EN08 Compliance and Field Services	16,815	16,641	16,399	(242)	
EN09 Forest Services					
Forest Programs	6,816	6,667	6,854	187	
Reforestation	2,847	3,750	2,834	(916)	3
Insect and Disease Control	2,045	2,175	2,218	43	
Subvote Total	11,708	12,592	11,906	(686)	
EN10 Wildfire Management					
Forest Fire Operations	48,812	54,503	47,528	(6,975)	4
Recoverable Fire Suppression Operations	1,529	1,400	2,738	1,338	5
Forest Fire Capital Projects	8,644	8,729	8,921	192	
Subvote Total	58,985	64,632	59,187	(5,445)	
EN11 Environmental Protection					
Industrial	2,385	2,600	3,008	408	6
Municipal**	4,378	4,342	4,054	(288)	
Compliance Audit	3	469	129	(340)	7
Environmental Assessment	1,207	1,303	1,183	(120)	
Beverage Container Collection and Recycling System	20,621	21,778	21,778	-	
Saskatchewan Watershed Authority - Operations**	4,414	12,234	12,234	-	
Saskatchewan Watershed Authority - Flood Relief	33,860	-	-	-	
Subvote Total	66,868	42,726	42,386	(340)	
EN15 Land	2,878	3,043	2,892	(151)	
EN07 Fish and Wildlife					
Fish and Wildlife Program**	3,672	5,227	5,411	184	
Fish and Wildlife Development Fund	4,997	3,804	3,842	38	
Subvote Total	8,669	9,031	9,253	222	

	2011-12 Actual Expenditures ($000s)	2012-13 Approved Estimates ($000s)	2012-13 Actual Expenditures ($000s)	2012-13 Variance ($000s)	
EN14 Environmental Support					
Aboriginal Affairs	681	874	581	(293)	8
Strategic Planning and Performance Improvement	520	1,038	474	(564)	9
Information Management and Geomatics	7,483	7,124	7,246	122	
Client Services	1,047	1,097	1,066	(31)	
Technical Resources**	2,854	3,957	4,232	275	
Subvote Total	12,585	14,090	13,599	(491)	
Subtotal	**207,831**	**184,874**	**174,424**	**(10,450)**	
Capital Assets Acquisitions	(13,197)	(14,299)	(13,767)	532	
Capital Assets Amortization	6,709	7,707	7,567	(140)	
Non-spending Control Items	(1,174)		877	877	
Total Expense	**200,169**	**178,282**	**169,101**	**(9,181)**	

* The 2012-13 Approved Estimates in Forest Programs has been reduced by $180,000 from the original Estimates to reflect the transfer of the forest economic development functions to the Ministry of Economy.

** The actual expenditures for the Ministry include an operating grant payment of $12.2 million to the Water Security Agency (WSA) as well as $1.222 million for the transfer of 36 positions to the WSA in January 2013 ($1.1 million from Municipal; $66,000 from Fish and Wildlife Program; $56,000 from Technical Resources). These additional payments relate to the salary and operating costs of the positions as well as the pension, benefits and leave liability.
Explanation of Variances:

(1) Savings related to vacant positions and lower than anticipated travel expenditures.

(2) Under expenditure associated with vacant positions, Go Green projects that did not proceed and the Ministry's contribution to the Government-wide expenditure restraint strategy.

(3) Due to savings in contractual expenditures associated with poor weather conditions and insufficient contractor capacity as well as a decreased requirement for site preparation work.

(4) Primarily due to low fire activity during the 2012 fire season.

(5) Over expenditure due to higher than budgeted export of fire crews.

(6) Due to mid-year reorganization which resulted in the transfer of an additional 10 employees to the branch.

(7) Vacancy and operational savings due to a delay in implementing the environmental audit function in the Ministry.

(8) Savings primarily related to vacant positions.

(9) Savings associated with delays in staffing vacant positions.

The following table describes actual funding provided to third parties in 2012-13:

Grant Recipient	Purpose of Grant	Amount Paid ($000s)
Articcan Energy Services Inc.	Go Green Fund - Measurement and reporting guidance document for greenhouse gas	30
Beverly & Qamanirjuaq Caribou Management Board	Caribou Habitat Agreement- operating grant	25
Canadian Council of Ministers of the Environment	Annual membership dues	32
Canadian Student Leadership conference	Go Green Fund - Conference sponsorship grant	10
Canada Green Building Council	Go Green Fund- Sponsorship for the "Building Saskatchewan Green" conference	5
Central Flyway Council Inc.	Operating grant for Arctic Goose Banding, Fall White-Fronted Goose (WFG) aerial survey	5
City of Regina	Go Green Fund - Hydraulic Launch Assist (HLA) Garbage Truck	30
Clean Farms Inc.	Funding to support the development of a recycling program plan for agricultural plastics in Saskatchewan	60
Environment System Assessment Canada	Go Green Fund -To co-ordinate research and funding activities for a project on landscape connectivity and biodiversity	76
Fish and Wildlife Development Fund	Operating grant – 30 per cent of revenues collected by the province on certain angling and hunting licences issued	3,842
Foothills Research Institute	Grant to support science network and research collaboration for the Canadian Western Boreal Natural Landscape Pattern Modeling Project	100
FpInnovations	Funding for a research and development program aimed at wildland fire suppression, protection and management	10
Fur Institute of Canada	Annual contribution to maintain core operational capacity and administer program	13
Ground Effects Environmental Services Inc.	Go Green Fund- Facilitate enhanced electrocoagulation for industrial wastewater reuse	9
ICF Consulting Canada Inc.	Go Green Fund - Research, modeling, and analysis of the Saskatchewan Climate Change compliance framework	172
Indigenous Visions Inc. c/o Carol Crowe	Funding to help build the Environmental Aboriginal Human Resources Environmental Monitoring Program	5

Grant Recipient	Purpose of Grant	Amount Paid ($000s)
KHK Consulting Ltd	Go Green Fund - Review/revision of Carbon Offset Protocols and Guidance Documents	20
Luther College	Go Green Fund - Sponsorship for the Regional Centre of Expertise on Education for Sustainable Development	5
Newaz Ahmed	Grant to support research of zoonotic diseases	5
Partners in Protection	Grant for boreal handbook	5
Partners for the Sask. River Basin	Go Green Fund- Sponsorship for the Saskatchewan Envirothon	8
Petroleum Technology Research Center	Go Green Fund - Deep Saline Aquifer Carbon Storage Project	400
Prairie Adaptation Research Collaborative	Laboratory support	25
Prince Albert Grand Council	Sponsorship for Northern Saskatchewan Trappers Association Annual Convention	5
Prasino Group	Grant to develop case studies for the Conservation Cropping and Nitrogen Emission Reduction Protocols	10
Receiver General for Canada Canadian Council of Forest Ministers' Secretariat	Canadian Council of Forest Ministers contribution	21
Saskatchewan Association of Rehabilitation Centers	Operating grant for implementation of the beverage container collection and recycling program by SARCAN	21,778
Saskatchewan Co-Operative Fisheries Ltd.	Operating grant	50
Saskatchewan Eco-Network Inc.	Grant to support the coordination of education and awareness projects on environmental issues	25
Saskatchewan Environmental Society	Grant for water monitoring with Northern schools	50
Saskatchewan Research Council	Go Green Fund - Ethanol Catalyst Project	200
Saskatchewan Water Appeal Board	Operating grant	37
Saskatchewan Watershed Authority	Payment for salaries and operating expenses for employees transferred to the Water Security Agency mid year	965
Saskatchewan Watershed Authority	Operating grant	12,234
Saskatchewan Wildlife Federation	Operating grant	10
Saskatchewan Wildlife Federation	Annual convention funding	5
South East Saskatchewan Airshed Association	Conditional grant for the purchase of additional continuous air monitoring equipment	45

Grant Recipient	Purpose of Grant	Amount Paid ($000s)
University of Alberta	Grant for examining linkages between survey data and future forest conditions	22
University of Alberta	Funding to support research on the Mixed wood Growth Model Calibration for Jack Pine in Alberta, Saskatchewan and Manitoba	15
University of Alberta	Research on the Western Boreal growth and yield	13
University of Alberta	Cougar research funding	5
University of Regina	Go Green Fund - Develop a GIS-aided greenhouse gas baseline emission level database	20
University of Saskatchewan	Operational funding for the Canadian Cooperative Wildlife Health Centre (CCWHC) - Disease Research	41
University of Saskatchewan	Funding to support the Air Research Group (ARG) Respiratory Health Study	45
Wildlife Habitat	Operating grant	5
Other (Individual grants less than $4,000)		17
TOTAL GRANTS		**40,510**

Revenues

The majority of the revenue collected by the Ministry of Environment relates to environmental handling charges, hunting and angling licence fees, forestry fees and dues and receipt from other governments for recoverable fire suppression costs. These revenues are collected on behalf of Government and all revenue collected is deposited into the General Revenue Fund.

The Ministry's budgeted revenue for 2012-13 was $50.2 million; actual revenue recorded was $59.9 million. This variance is due to an increase in the number of exports of aircraft and personnel to other provinces and the United States for recoverable fire suppression, an increase in unredeemed bottle deposits and a refund of unused grants.

Description of Revenue	2012-13 Budget ($000s)	2012-13 Actual ($000s)	Variance ($000s)	
Own-Source Revenue				
Other Licences and Permits	15,839	17,190	1,351	
Sales, Services and Service Fees	23,602	24,029	427	
Interest, Premiums, Discount and Exchange	30	30	-	
Transfers from Other Governments	1,400	6,198	4,798	1
Other Revenue	5,767	8,543	2,776	2
Transfers from the Federal Government	3,594	3,928	334	
Total Revenue Items	**50,232**	**59,918**	**9,686**	
Non-Revenue Items	0	39	39	
Total Revenue & Non-Revenue Items	**50,232**	**59,957**	**9,725**	

Explanation of Variances:

(1) Due to an increase in the number of exports of aircraft and personnel to other provinces and the United States for recoverable fire suppression.

(2) Primarily due to an increase in unredeemed bottle deposits and a refund for the unused portion of a grant.

Other

Fish and Wildlife Development Fund

The Fish and Wildlife Development Fund (FWDF) is a special purpose fund used by the Ministry to support habitat protection and management throughout the Province. Revenues are transferred to the FWDF based on an amount equivalent to 30 per cent of habitat licence certificates and certain hunting, trapping and angling licence fees collected by the Province. Basic expenditures relate to habitat protection through the purchase of habitat and management and enhancement of habitat.

The following table outlines summary information on budgeted and unaudited results for 2012-13 relating to the operations of the fund.

Audited financial statements will be available at www.gov.sk.ca/finance under the publications section of their website.

Fish and Wildlife Development Fund for the period ending March 31, 2013

(based on unaudited figures)	2012-13 Budget ($000s)	2012-13 Actual ($000s)	Variance ($000s)	
Revenue	3,984	4,096	112	
Expenses:				
Fish Enhancement Projects	1,595	1,579	(16)	
Wildlife Habitat Projects	1,454	1,609	155	1
Grant in Lieu of Taxes	250	231	(19)	
Total Expenses	3,299	3,419	120	
Excess of Revenues over Expenses	685	677	(8)	

Explanation of Variances:

(1) Due to higher than anticipated expenditures on grants payments.

For More Information

The Ministry of Environment welcomes your comments and questions.

We can be contacted by e-mail: centre.inquiry@gov.sk.ca

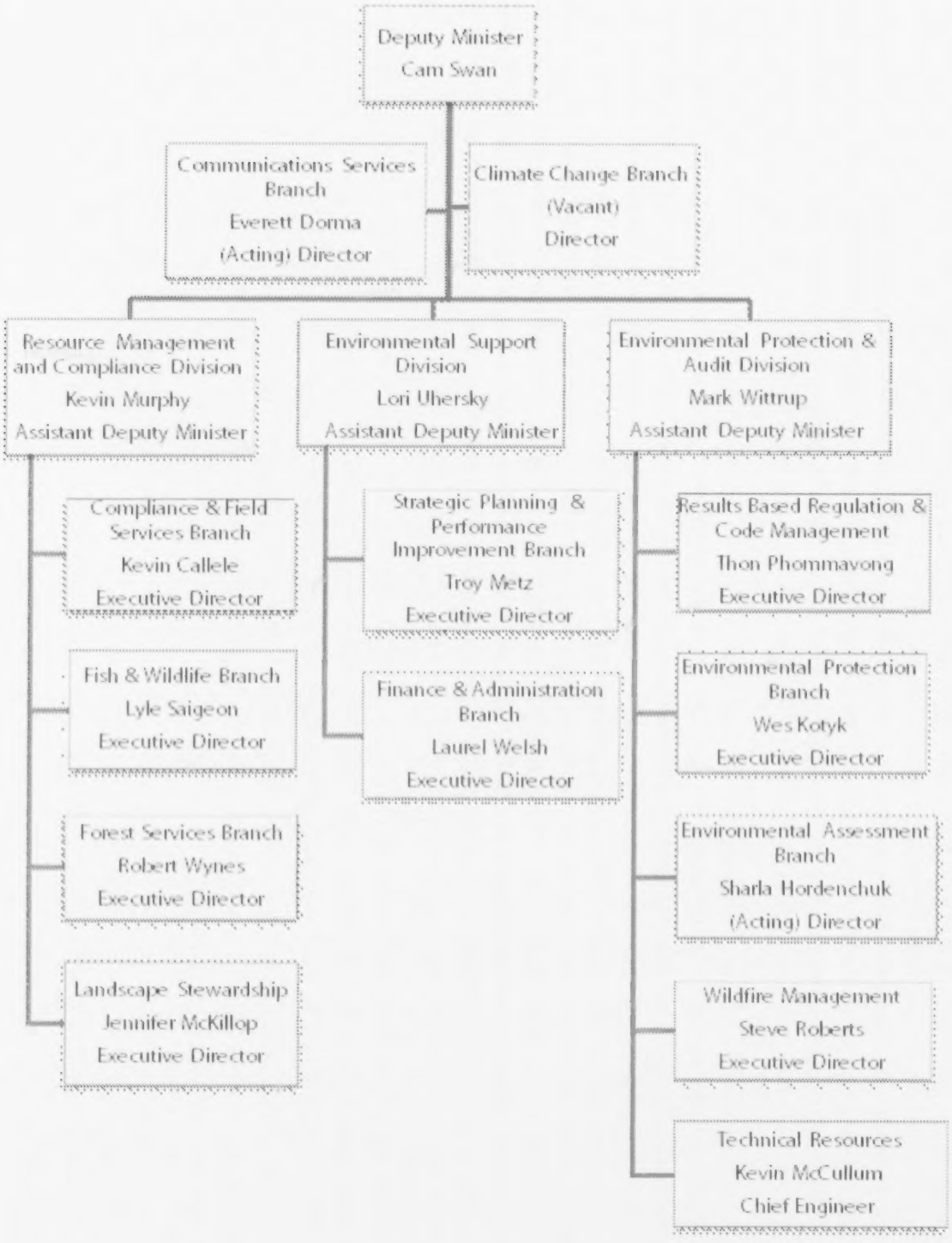
Phone: Lawrence Baschak (306) 787-8884

If your inquiry is of a general nature call toll-free in North America 1-800-567-4224

Or by mail: 3211 Albert Street, REGINA, SK S4S 5W6

This annual report is also available in electronic format from the Ministry's website at www.environment.gov.sk.ca

Appendix A - Organizational Chart



Appendix B - Administered Legislation

The Ministry derives its mandate, responsibilities and authority from a number of Acts and regulations under those Acts.

Acts currently assigned to the Minister of Environment are:

- *The Clean Air Act* protects Saskatchewan's air quality by regulating emissions that originate in the Province.
- *The Conservation Easements Act* encourages private landowners, conservation organizations and governments to protect ecologically sensitive lands and natural areas through voluntary agreements.
- *The Ecological Reserves Act* protects unique, natural ecosystems and landscape features through the designation of Crown land as ecological reserves.
- *The Environmental Assessment Act, 2010* provides a practical means to ensure that development proceeds with adequate environmental safeguards and in a manner broadly understood by and acceptable to the public through the integrated assessment of environmental impact.
- *The Environmental Management and Protection Act, 2002* protects the air, land and water resources of the Province through regulating and controlling potentially harmful activities and substances.
- *The Fisheries Act (Saskatchewan), 1994* enables sustainable management of fisheries resources by affirming provincial ownership of fish, creating a provincial licensing system, and regulating allocation of fish resources, fish marketing, aquaculture, sport fishing and commercial fishing.
- *The Forestry Professions Act* establishes the Association of Saskatchewan Forestry Professionals, an organization independent of Government and industry, responsible for ensuring that its members maintain required standards for competency and conduct.
- *The Forest Resources Management Act* allows the Ministry to implement a framework for sustainable management of Saskatchewan's forest resources.
- *The Hunting, Fishing and Trapping Heritage Act* recognizes hunting, fishing and trapping as protected activities in accordance with the law in Saskatchewan and designates November 15 of each year as Hunting, Fishing and Trapping Heritage Day.
- *The Litter Control Act* makes littering an offence and provides for the establishment and administration of a deposit refund system for various beverage containers.
- *The Natural Resources Act* (subject to OC 208/96) establishes the Province's mandate to manage, protect, conserve and develop renewable resources in a sustainable manner.
- *The Prairie and Forest Fires Act, 1982* provides for the prevention, detection and suppression of prairie and forest fires originating in provincial forests, parks and on unoccupied Crown lands. It also governs compensation for conscripted fire fighters and authorizes establishment and regulation of fire bans and burning permit areas.
- *The Protection of the Wild Ponies of the Bronson Forest Act* provides protection for the wild ponies of the Bronson Forest.
- *The Provincial Lands Act* creates authority for the management and transfer of Crown lands.
- *The Sale or Lease of Certain Lands Act* gives Cabinet the ability to place conditions on the transfer or lease of lands listed in a schedule to this Act.
- *The State of the Environment Report Act* provides for public accountability in reporting of environmental conditions and activities through the preparation and release of a State of the Environment Report every two years.
- *The Water Appeal Board Act* establishes the Water Appeal Board and enables the board to hear appeals regarding water, sewage and drainage issues.
- *The Wildlife Act, 1998* provides for the management, conservation and protection of wildlife resources through the issuance and revocation of licences, the prosecution of wildlife offences and the establishment of annual hunting seasons.
- *The Wildlife Habitat Protection Act* provides for the management, conservation and protection of wildlife lands and wildlife by preventing the sale and alteration of certain Crown lands.

Acts currently assigned to the Minister Responsible for the Water Security Agency are:

- *The Conservation and Development Act*
- *The Saskatchewan Watershed Authority Act, 2005*
- *The Water Power Act*
- *The Watershed Associations Act*

New acts that have received Royal Assent but are not yet in force:

- *The Environmental Management and Protection Act, 2010* protects the air, land and water resources of the Province through regulating and controlling potentially harmful activities and substances. This Act, once proclaimed, will repeal and replace The Environmental Management and Protection Act, 2002, The Clean Air Act, The State of the Environment Report Act and The Litter Control Act.
- *The Management and Reduction of Greenhouse Gases Act* is aimed at reducing greenhouse gas emissions, as well as promoting investments in low-carbon technologies.
- *The Forest Resources Management Act 2010* allows the Ministry to implement a framework for sustainable management of Saskatchewan's forest resources.

Appendix C - Key Partners and Stakeholders

The organizations listed below are considered the Ministry of Environment's primary partners/stakeholders because they:

- are provincial in scope;
- have a significant impact on the environment or natural resources; or
- are involved in major current issues or maintain a long-term relationship with the Ministry.

- Aallcann Wood Suppliers Inc.
- Agency Chiefs Tribal Council
- Agrium Inc.
- AREVA Resources Canada Inc.
- Association of Professional Engineers and Geoscientists of Saskatchewan
- Association of Regional Waste Management Authorities of Saskatchewan
- Association of Saskatchewan Forestry Professionals
- Battlefords Agency Tribal Chiefs
- BHP Billiton
- Cameco Corporation
- Canadian Association of Geophysical Contractors
- Canadian Association of Petroleum Producers
- Canadian Bankers Association
- Canadian Cancer Society
- Canadian Cooperative Wildlife Health Centre
- Canadian Energy Pipeline Association
- Canadian Environmental Assessment Agency
- Canadian Food Inspection Agency
- Canadian Forest Service
- Canadian Heritage River System Board
- Canadian Institute of Forestry
- Canadian Interagency Forest Fire Centre
- Canadian Nuclear Safety Commission
- Canadian Parks and Wilderness Society
- Canadian Petroleum Products Institute
- Canadian Plains Research Center
- Canadian Standards Association
- Canoe Saskatchewan
- Carrier Forest Products Inc.
- Claude Resources Inc.
- CleanFarms
- Communities of Tomorrow
- Consulting Engineers of Saskatchewan
- Consumer's Co-operative Refineries Ltd.
- Crop Life Canada
- Crown Investments Corporation of Saskatchewan
- Ducks Unlimited Canada
- Edgewood Forest Products
- Enbridge Inc.
- Enterprise Saskatchewan
- Environment Canada
- Envirotec Services Inc.
- ERCO Worldwide
- Evraz Inc. NA
- Federated Co-operatives Ltd.
- Federation of Saskatchewan Indian Nations
- File Hills Qu'Appelle Tribal Council
- First Nations University of Canada
- Fisheries and Oceans Canada
- FPInnovations-FERIC
- Golden Band Resources Inc.
- Green Lake Métis Wood Products Ltd.
- Health Canada
- Hudson Bay Mining and Smelting
- Husky Energy
- Imperial Oil Ltd.
- Independent Forest Operators of Saskatchewan
- Indian and Northern Affairs Canada
- Interior West Fire Council
- Iogen Corp.
- Karnalyte Resources Inc.
- Kitsaki Management Limited Partnership
- K+S Potash Canada
- L & M Wood Products Ltd.
- Lehner Wood Preservers Ltd.
- Louis Dreyfus Canada Ltd.
- Meadow Lake Mechanical Pulp
- Meadow Lake OSB Limited Partnership
- Meadow Lake Tribal Council
- MeeToos Forest Products Ltd.
- Métis Nation - Saskatchewan (MNS) and MNS Regions
- Mistik Management Ltd.
- Moose Jaw Asphalt (Gibsons Energy)
- Mosaic Co.
- Natural Resources Canada
- Nature Conservancy of Canada
- Nature Saskatchewan
- New North
- Noramera Bioenergy Corp.
- NorSask Forest Products Ltd.
- Northern Saskatchewan Trappers Association
- Northwest Communities Wood Products Ltd.
- North West Municipalities Association
- Northwest Wildland Fire Compact
- Oilsands Quest Inc.
- Operator Certification Board
- Paper Excellence
- Parkland Industries Ltd.
- Parks Canada
- Partners for the Saskatchewan River Basin
- Potash One
- Potash Corporation of Saskatchewan
- Prairie Adaptation Research Collaborative
- Prairie Farm Rehabilitation Administration
- Prairie Mines and Royalty Ltd.
- Prince Albert Grand Council
- Product Care Association (Saskatchewan Paint Stewardship Program)
- Provincial Association of Resort Communities of Saskatchewan
- Regina Fish and Game League

- Richardson Nutrition Holding Ltd.
- Sakâw Askiy Management Inc.
- Saskatchewan Applied Science Technologists and Technicians
- Saskatchewan Archaeological Society
- Saskatchewan Association of Firearm Education
- Saskatchewan Association of Rehabilitation Centres
- Saskatchewan Association of Resource Recovery Corporation
- Saskatchewan Association of Rural Municipalities
- Saskatchewan Association of Rural Water Pipelines
- Saskatchewan Black Powder Association
- Saskatchewan Bowhunters Association
- Saskatchewan Chamber of Commerce
- Saskatchewan Cooperative Fisheries Ltd.
- Saskatchewan Eco Network
- Saskatchewan Environmental Industry and Managers Association
- Saskatchewan Environmental Society
- Saskatchewan Falconry Association
- Saskatchewan Federation of Flyfishers
- Saskatchewan Forestry Association
- Saskatchewan Government and General Employees Union
- Saskatchewan Government Growth Fund Management Corporation
- Saskatchewan Institute of Applied Science and Technology (SIAST)
- Saskatchewan Minerals Inc.
- Saskatchewan Mining Association
- Saskatchewan Ministry of Agriculture
- Saskatchewan Ministry of Energy and Resources
- Saskatchewan Ministry of First Nations and Métis Relations
- Saskatchewan Ministry of Health
- Saskatchewan Ministry of Municipal Affairs
- Saskatchewan Ministry of Tourism, Parks, Culture and Sport
- Saskatchewan Nature and Ecotourism Association
- Saskatchewan Outfitters Association
- Saskatchewan Parks and Recreation Association
- Saskatchewan Potash Producers Association
- Saskatchewan Public Works Association
- Saskatchewan Pulse Growers Association
- Saskatchewan Research Council
- Saskatchewan Scrap Tire Corporation
- Saskatchewan Snowmobile Association
- Saskatchewan Soil Conservation Association
- Saskatchewan Stock Growers Association
- Saskatchewan Trappers Association
- Saskatchewan Urban Municipalities Association
- Saskatchewan Waste Electronic Equipment Program
- Saskatchewan Waste Reduction Council
- Saskatchewan Water Appeal Board
- Saskatchewan Water and Wastewater Association
- Saskatchewan Watershed Authority
- Saskatchewan Wild Rice Council
- Saskatchewan Wildlife Federation
- Saskatoon Tribal Council
- SaskEnergy
- SaskPower
- SaskTel
- SASKTIP Inc.
- SaskWater
- Shell Canada
- Shore Gold Inc.
- Small Explorers and Producers Association of Canada
- Southeast Saskatchewan Airshed Association
- Southeast Treaty #4 Tribal Council
- South Saskatchewan Wildlife Association
- Suncor/Petro-Canada
- Terra Grain Fuels
- Tolko Industries Ltd./Meadow Lake OSB
- Touchwood Agency Tribal Council
- Tourism Saskatchewan
- TransCanada Corp.
- University of Regina
- University of Saskatchewan
- Vale Potash Canada Ltd.
- Vermette Trucking and Wood Preservers Ltd.
- Viterra Inc.
- Wascana Centre Authority
- Western Yellowhead Air Management Zone
- Weyerhaeuser Canada Ltd., Saskatchewan Division
- Wild West Steelhead
- Whitemud Resources Inc.
- Wood Preservation Canada
- World Wildlife Fund
- Yara Belle Plaine Inc.
- Yorkton Tribal Council
- Zelensky Brothers

Appendix D - Publications Released by the Ministry

Environment
- 2011-12 Environment Annual Report
- 2011-12 Environment Highlight Sheet
- 2011-12 Environment Plan
- 2011-12 Budget Highlights
- 2011 State of the Environment Report
- 2010-11 Environment Annual Report
- 2010-11 Environment Highlight Sheet
- 2010-11 Drinking Water Annual Report
- 2010-11 Drinking Water Highlight Sheet

Results-Based Regulation
- Frequently Asked Questions

Saskatchewan Environmental Code
- Saskatchewan Environmental Code – DRAFT
- Code Discussion Document
- Code Summary

Air
- Saskatchewan Air Monitoring Lab Fact Sheet

Climate Change
- Hydraulic Launch Assist Garbage Truck Fact Sheet

Environmental Assessment
- EA Annual Update 2011
- Environmental Review Guidelines for Oil and Gas Activities
- Technical Proposal Guidelines
- Environmental Assessment Process

Fishing
- 2010 Fish Facts
- 2010 Stocked Waters Guide
- 2012 Anglers' Guide
- 2012 Angers' Guide – French
- Fish Diseases
- Fish ID
- Fisheries Management Field Areas
- Fishing FAQ's
- Mercury in Fish Consumption Report 2010
- 2011 Fish Facts
- Fisheries Management Fact Sheets (Aboriginal, Recreational, Commercial, Outfitting)

Forest
- Field Guide to the Ecosites of Saskatchewan's Provincial Forests, 2010
- Saskatchewan's 2009 State of the Environment Report – State of Saskatchewan's Provincial Forests
- Saskatchewan Forest Vegetation Inventory
- Forest Pests Fact Sheets
- Dwarf Mistletoe Ecology and Management

Go Green
- Eat Healthy Foods Fact Sheet
- Native Plants in the Classroom
- ElectroPure Technology
- Landscape Connectivity Model and Focused Habitat Securement Fact Sheet

Hunting
- 2012 Hunting Frequently Asked Questions
- 2012 Hunters' and Trappers' Guide
- 2012 Hunters' and Trappers' Guide – French
- 2012 Big Game Draw and Spring Hunting Guide
- 2012 Saskatchewan Resident Big Game Draw Overview
- 2012 Canadian Resident White-tailed Deer Draw Overview
- 2012 Statistics – Applicants/Licences Issued by Pool Status

Wildlife
- Invasive Species Fact Sheet
- Invasive Species Brochure
- Diseases from Wildlife
- Summary of the Provincial CWD Sampling Effort
- Northern Snakehead Factsheet
- Prohibited Fish Fact Sheet

Trapping
- Saskatchewan Wild Fur Harvest and Cash Values 2010-11

Waste Management
- Septic Waste Disposal Fact Sheet

Wildfire Management
- 2011 Saskatchewan Pilot's Handbook
- Protecting Your Home from Wildfire
- Best Practices for Open Burning
- Saskatchewan Environment Protocol for Providing Assistance on Municipal Fires